University of Alberta

An Exploration of Musical Play and Scaffolding in Early Childhood

by

Kathryn M. Smith ©

A thesis submitted to the Faculty of Graduate Studies and Research in partial fulfillment of the requirements for the degree of Doctor of Philosophy

Department of Elementary Education

Edmonton, Alberta

Spring 2008

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Ottawa ON K1A 0N4
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Your file Votre référence
ISBN: 978-0-494-45602-6
Our file Notre référence
ISBN: 978-0-494-45602-6

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ABSTRACT

The purpose of this qualitative study was to explore the ways in which young children and their teachers scaffold musical growth and understanding within a context of musical play. Although early childhood educators have long acknowledged play as having a significant role in the education of young children, it is often absent in the context of early childhood music education. This study was situated within a social constructivist paradigm and guided by Vygotsky's (1978) theory of the zone of proximal development and Wood, Bruner, and Ross' (1976) notion of scaffolding as it is applied in education.

Case study research design that employed the tools and techniques associated with ethnography was used to investigate the research questions: 1) *How do young children scaffold their own and their peers' musical growth and understanding during musical play*? and 2) *How do early childhood educators scaffold young children's musical growth and understanding during musical play?* Research took place over a 3-month period in an urban nursery school and documented the interactions between the teacher, the participant observer researcher, and nineteen 4-year old children as they participated in musical play. Data were collected through video tapes, photographs, transcribed observations, and journal entries.

Results indicated that musical play can provide an important context in which a child's zone of proximal development for musical growth and understanding can be recognized. Peer and teacher scaffolding practices during this play revealed a wide variety of approaches including those associated with assisted performance and shared activity (Bodrova & Leong, 2007). Results suggest that peer scaffolding can be

significant in propelling young children's growth in musical understanding and should be encouraged by music teachers of young children. Findings also indicated that teachers' abilities to recognize a child's zone of proximal development for growth in musical understanding as significant in assisting teachers in making appropriate scaffolding choices during musical play. The findings of this study point to musical play as vital to extending and expanding the scaffolding context in which young children experience music.

DEDICATION

To my wonderful and caring husband, Murray, who through his love and commitment has encouraged and supported me during this endeavour.

To my children, Madeline and Murray, who provide me with joy each and every day.

ACKNOWLEDGEMENTS

I wish to express my appreciation to the many people who supported me during the conception and completion of this study:

To the children of the nursery school who showed us the richness of childhood and the musical understandings that they possess

To the nursery school teacher who willingly and enthusiastically participated in the study

To the parents of the children who acknowledged the value of early childhood research by permitting their children to participate in the study

To the research assistants for their commitment to this research project

To my colleagues in the Department of Elementary Education at the University of Alberta for their friendship as well as their commitment to children and research

To my parents who provided me with my first music experiences

To my mother- and father- in law who supported this endeavour through their many questions

To my friends and family who continually offered support and encouragement

To the members of my supervisory committee, Dr. Robert de Frece and Dr. Anna Kirova, for their friendship, insight, and guidance over the course of this project

To Dr. Tom Dust and Dr. Larry Prochner for their questions, contributions, and suggestions

To my supervisor, Dr. Amanda Montgomery for the many conversations and her continued, insightful guidance over the course of my graduate program

To my children, Madeline and Murray for their patience during the time of my doctoral program and their own love of music

To my wonderful husband, Murray for his continuous commitment, love, understanding, and encouragement

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CHAPTER ONE:

INTRODUCTION

Early childhood educators, researchers, and scholars have long acknowledged play as an important contributor to children's learning (Erikson, 1963; Fleer, 1999; Piaget, 1962; Vygotsky, 1978). Its role is considered significant in enabling children to learn to think, move, speak, and imagine (Cohen, 2006). Play is also recognized as a primary contributor to the emotional and social development of children (Corsaro, 1997; Parten, 1932). Frost, Wortham, and Reifel (2001) suggest that, "play [also] tells us a great deal about who we are as human beings" (p. 4) and educators have acknowledged the significant place of play in the lives of children. Bodrova and Leong (2007) agree, indicating that play is a significant teaching tool and Vygotsky (1978) asserts that:

> In play a child always behaves beyond his average age, above his daily behavior; in play it is as though he was a head taller than himself. As in the focus of a magnifying glass, play contains all the developmental tendencies in a condensed form and is itself a major source of development. (p. 102)

Unfortunately, although play is widely accepted as an essential teaching strategy in early childhood settings, it has traditionally not been regarded as a critical component of music instruction for young children. Instead, a large-group, teacher-centred approach has most frequently been used to facilitate learning in early childhood settings (Andress, 1998). As Hildebrandt (1998) indicates:

> Unlike other areas of curriculum, where exploration and experimentation are encouraged, the main focus of music time is often to get everybody to do the same

> thing at the same time and do it well. Even though many teachers would like to believe that they are using music as a vehicle for creative expression, what they are actually doing is using music to control children's behavior. (p. 69)

Given the emphasis on constructivist-based learning and play environments that predominate the current early childhood educational milieu (Berk, 2006), it is surprising that musical play is rarely found to be a part of the young child's school day. Indeed, musical understanding defined by Montgomery (2002) as "the ability to think and act musically with personal meaning" (p. 358) is a laudable goal for early childhood music experiences. However, since many music classes for young children in Canada often reside in Conservatories or are connected with performance-based programs and music education business ventures, parent and curricular expectations regarding music literacy and performance may pressure teachers into choosing classroom structures that emphasize product (musical performance and reading) over process (growth towards musical understanding) (Smith & Montgomery, 2007).

Lack of teacher comfort level may also contribute to why musical play is not widely used in early childhood music settings. For example, Tarnowski (1999) suggests that many teachers feel uncomfortable when they are not in charge of musical learning while Smithrim (1997) indicates that some teachers have concerns about noise and classroom management challenges. Montgomery (2002) proposes the possibility that teacher comfort levels concerning their personal music skills and conceptual knowledge of music may be the problem in this seemingly contradictory curricular and instructional choice. Group singing, listening, moving, and performing on instruments are activities in

which children happily participate, thus comfort level is achievable for both teachers and students within a structured, teacher-directed setting. Additionally, early childhood teachers may assume it is more difficult to perform an active role in promoting and supporting children's learning if one's knowledge of music is minimal; thus, the use of teacher-directed and teacher-controlled instruction, such as pre-organized, easy to follow, structured, published lessons, may avoid uncomfortable music teaching situations (Smith & Montgomery, 2007).

On the other hand, many music specialists who knowingly have the necessary skills to nurture children's growth in musical understanding also have traditionally chosen the same large-group, teacher-directed instruction style for their early childhood music classes (Andress, 1998; Morin, 2001). Although singing games, an example of children's structured play, can be found in many early childhood music classrooms taught by specialists (Lew & Campbell, 2005), musical play is rarely embedded within the overall curriculum structure (Smith, 2005). Additionally, very little research which explores the ways in which children's musical growth can be supported and extended during musical play has been conducted and therefore teachers and other early childhood professionals may simply be unsure of the ways in which they can assist children's musical growth within a context of musical play. As a result, this study will address the lack of understanding that early childhood peers, teachers, and other professionals have regarding the ways in which the development of musical understanding can be supported within the context of musical play. A look at the ways in which early childhood peers and

teachers scaffold musical growth and understanding during musical play will serve as the focus of this study.

Situating Myself within the Research Inquiry

My experiences as a long time music teacher prompted me to begin to further investigate the area of musical play. The teaching assignment that I held at my last school was exclusively comprised of teaching early childhood music. Even though I had taught early childhood music in the past, it was always combined with teaching classes in the upper elementary grades. This new assignment gave me an opportunity to work solely with young children. Teaching young children has always been a passion of mine and this is evidenced in the work that I accomplished in the school district with which I was associated for the majority of my career. During my time as a music consultant I worked extensively with the early childhood consultants and teachers. I developed and presented workshops that were attended by numerous early childhood educators and was called upon by leaders in other school jurisdictions to provide assistance, in-service opportunities, and conference presentations in early childhood music. I had articles published related to early childhood music and led a team of music educators in the development of handbooks that were designed to assist teachers in the area of early childhood music education.

In my position as an early childhood music teacher in an international school I had time to more deeply consider early childhood music education. The school schedule provided teachers with an abundance of preparation time and this allowed me time to

read and think about my teaching practice as I prepared a program for the children with whom I worked. I also had an opportunity to observe several early childhood classrooms and consider what took place in those classrooms in relation to that which I had observed in Canadian classrooms, including the early childhood teaching/learning contexts of my own children. I began to wonder why children in the early childhood classrooms were provided with many opportunities for play and unstructured participation while in music classes it was expected that children would be involved in structured music instruction with performance as an end product. It was surprising to me that the parent handbook of the school in which I taught described the early childhood music program as one that was focused on performance for I had not been invited to provide information regarding the early childhood music program description, even though I was the music teacher.

This prompted me to discuss with the administration the prospect of changing the early childhood music program expectations and exploring the possibility of beginning to include some aspects of unstructured musical play within each music class. At that time I had not read extensively on musical play or play but it seemed to me that the inclusion of some facets of musical play would provide the children with a teaching/learning environment that was be more closely aligned with that which they experienced in their early childhood classroom. I was also anxious to begin to de-emphasize the performance aspect of the music curriculum. The administrators of the school supported me in my request to begin to make changes but unfortunately this change did not come to be, for I returned to Canada when the political environment in which we lived became less safe

and we acknowledged our desire to have our children continue their education in a Canadian environment.

Upon my return to Canada I had the opportunity to continue my education and work towards a Master's degree in elementary education. I could now begin to explore my questions and concerns regarding early childhood music education and the relationship that play might have in the implementation of early childhood music programs. In the research for my Master's degree, I observed and described the activities of 19 4-year-old junior Kindergarten children as they engaged in musical play over a 9-week period. Through ethnographic observation and data collection, I identified many of the activities in which children engaged during musical play as those which are often described in music curriculum documents as skills (e. g., singing, playing instruments, listening, moving, reading, writing, and composing). The children also used music as a stimulus for and during dramatic play.

The study (Smith, 2005) revealed that the children who were observed in a musical play environment appreciated and enjoyed freedom of choice; joyfully explored the skills of music; used music playtime fully and responsibly; challenged and encouraged their classmates; cooperated, assisted, discussed, and observed; concentrated for long periods of time; focused on their chosen activities without being distracted by other surrounding activity and noise; respected equipment and the work of others; and scaffolded themselves and their classmates. Data indicated that the children developed skills associated with music literacy, cognition, creativity, and emotional development.

The analysis of the data allowed me to recommend the importance of including long periods of musical play as part of early childhood music experiences in order that children may develop many of the skills of music through social interaction with their peers (Smith, 2005). I also suggested that, during extended periods of musical play, teachers have opportunities to observe children's musical development and make curricular and planning decisions based on their observations.

This study provided a basis from which I could explore musical play more extensively when I was accepted into the Ph.D. program. I was motivated to look more deeply into the role of the teacher during musical play after speaking about my first study with teachers who then asked how this might really work in their early childhood music classrooms. What would be the role of the teacher?

I continued to consider musical play and reflect upon my beliefs about children and learning. I asked myself why I had such a deep interest in exploring this topic further. My doctoral program required that I continue to study curriculum and research methods at a depth that I had not previously experienced. Under the guidance and expertise of professors in the department and through many readings, discussions, and presentations I was able to explore many of my own assumptions and understandings regarding children, teaching, and learning. I was also given the opportunity to reflect on my background both as a child and as an adult. I began to see the relationship between my personal childhood musical play experiences and my beliefs regarding that which was important in the fostering and encouraging of musical growth in my own children as well as in the

children that I taught. I started to understand why this aspect of teaching was of prime importance to me.

The formulation of my research inquiry has also been significantly impacted by my musical, personal, and educational experiences. Music was an important part of my family life as a child. Our family was particularly involved in church-related music activities which often involved singing that was accompanied by either piano or organ. Many members of my extended family, as well as my parents, sang in our church choir and my aunt was the church organist. As a child I also recall family gatherings which involved my aunt playing the piano at the home of my grandparents while my other aunts, uncles, and cousins gathered around and sang. Music was seen as a very important aspect of our family life.

As a young child I remember enjoying the chance to play the piano at my grandparent's home. I can clearly recall sitting on my grandfather's lap as he played and sang and then on another occasion pretending that I was a real performer as I played many of my own songs. My uncle listened and complimented me on my performance and asked if I was taking lessons because it sounded so good! It was after this time that my parents decided to give me piano lessons and, for some time before we acquired our own piano, I went to my grandparent's home to practice.

My interest and commitment to music throughout my childhood and into adulthood eventually led me to enroll in the Bachelor of Music program with a major in piano performance at a western Canadian university. I later transferred to the Bachelor of Education program with a major in elementary music when I realized that I really wanted

to be a teacher. I continued to take piano lessons until I finished university and now I was also the church organist.

Since that time I have had over 30 years' experience as an elementary school music specialist, an elementary classroom teacher, a music consultant for a large western Canadian school district, and a university instructor for undergraduate elementary education and arts students. I have taught pre-Kindergarten, primary, upper elementary, and middle school students in both Canadian and international school settings as well as in a privately operated early childhood music/dance studio and my own private piano studio. I have studied music, music education, early childhood music education, and early childhood education at the undergraduate and graduate levels with Canadian and American scholars.

Theoretical and Conceptual Framework

My beliefs regarding children and learning are based upon epistemological assumptions related to the ways in which children construct musical knowledge. Packer and Goicoechea (2000) remind us that, "epistemology is the systematic consideration, in philosophy and elsewhere, of knowing: when knowledge is valid, what counts as truth, and so on" (p. 227). It is my belief that children construct knowledge through their active involvement with music both individually and with others, that children go about knowing through their social involvement in and with the world, and that play has an important role in the social character of young children's learning.

On the other hand, according to Packer and Goioechea (2000), ontological assumptions concern the "known world and the knowing human" (p. 227). They further define ontology as "the consideration of being; what is, what exists, what it means for something—or somebody—to be" (p. 227). I have based this study on the ontological assumptions that children have musical abilities and that they have a capacity for the language of music. It is my belief that children are not *tabula rasa* and that they participate in music and musical play with a sense of agency. They are agents in their own learning.

With these epistemological and ontological assumptions as guides I began to consider more deeply the next step in my research and the desire to further the understanding of teachers regarding their possible roles within a musical play environment. Regrettably, research exploring the possibilities for using play as a vital teaching/learning strategy in early childhood music settings is still in its infancy. Although the place of play in early childhood music education has been explored by a few researchers (Berger & Cooper, 2003; Gluschankof, 2005; Jackson-Gough, 2003; Littleton, 1991; Morin, 2001; Nilsson, 2002; Smith, 2005; Smithrim, 1997; Stevens, 2003; Tarnowski & Leclerc, 1994; Young, 2003a, 2004), musical play as a practice in early childhood education is still not commonly accepted or implemented. One possible reason for the lack of musical play as a practice in early childhood music education may be uncertainty within the teaching profession regarding the role of the teacher during musical play.

Scaffolding is a term that is often used to describe the way in which external support for learning is provided and gradually removed (Bodrova & Leong, 2007). Within the early childhood education literature, scaffolding is often used to describe the many ways in which children are supported in their learning by teachers and peers (Hogan & Pressley, 1997). In comparison with the abundance of research concerning scaffolding as it relates to early childhood education, scaffolding as it applies to musical learning in early childhood has been addressed in only a few studies (Adachi, 1994; de Vries, 2005; St. John, 2006) and, as pointed out by Jordan-Decarbo and Nelson (2002) and de Vries (2005), applications of scaffolding in music education are scarce. Since scaffolding is indicated in the non-music early childhood literature as important to learning (Bodrova & Leong, 2007), it seemed critical to begin to investigate the possibilities for enhancing children's musical understanding during musical play through both peer and teacher interactions.

Constructivism

Within humanities and social science research, Guba and Lincoln (1994) identify four interpretive paradigms: positivism, post-positivism, critical theory, and constructivism. Most recently this has been expanded to also include the participatory/cooperative paradigm (Guba & Lincoln, 2005). A paradigm represents one's basic beliefs or worldview. According to Denzin and Lincoln (1994), "all research is interpretive, guided by a set of beliefs and feelings about the world and how it should be understood and studied" (p. 13). The worldview which I hold regarding my research is

within the constructivist paradigm. The constructivist paradigm acknowledges that "realities are apprehendable in the form of multiple, intangible mental constructions, socially and experientially based, local and specific in nature . . . and dependent for their form and content on the individual persons or groups holding the constructions" (Guba & Lincoln, 1994, pp. 110–111) as opposed to the positivist paradigm that maintains that there is a reality out there to be discovered. Denzin and Lincoln (1994) describe the constructivist paradigm as assuming "a relativist ontology (there are multiple realities), a subjectivist epistemology (knower and subject create understandings), and a naturalistic (in the natural world) set of methodological procedures" (pp. 13–14).

Parker and Goicoechea (2000) view "constructivist theories [as having] their roots in Piaget and [their] focus on the active character of the learner, interacting with the environment either singly or with others" (p. 228). They also point out that it was from Kant that Piaget took the basic insight that "the knower is active [to which he] added a developmental dimension" (p. 228). According to Parker and Goicoechea Piaget "employed a dualist ontology . . . an ontology of two realms: a subject and an independent world" (p. 228).

Constructivist approaches to teaching and learning have primarily emerged from the theories of Piaget and Vygotsky. Both theorists supported the idea that children construct their own knowledge and understandings of the world. Anning and Edwards (2004) note that Piagetian ideas "acknowledge that learning occurs as a result of active involvement with the environment; and that children construct . . . increasingly complex understandings over time" (p. 6). Ginsberg and Opper (1988) indicate that for Piaget,

construction of knowledge occurs primarily in interaction with physical objects and through action on the world. People, therefore, play an indirect role.

Social Constructivism

Social constructivism was influenced by the beliefs held by theorists and scholars, Hegel and Marx. Greene (1994) points to Hegel as one who believed that "the separated self had to be reconceived as an active, producing being forming nature through dialectical and historical activity" (p. 430). In addition, she indicates that Marx "also saw human beings producing a world" (p. 430). "Because of his Marxist background" (Wink & Putney, 2002, p. xxi) Vygotsky was greatly influenced by the theory of social constructivism. He believed that "cognitive construction is always *socially mediated;* [emphasis in original] it is influenced by present and past social interactions" (Bodrova & Leong, 2007, p. 9).

Verenikina (2006) maintains that "Vygotskian theory was built upon the Piagetian idea of the child as an active learner with the emphasis on the role of social interaction in learning and development" (p. 3). According to Wertsch (1985), both Piaget and Vygotsky "viewed internalization as a process whereby certain aspects of activity that had been performed on an external plane came to be executed on an internal plane" (pp. 61–62). However, they differed in that Vygotsky argued that the semiotically socially mediated processes "provide the key to understanding the emergence of internal functioning" (Wertsch, p. 61). Vygotsky contends that "social relations or relations

among people genetically underlie all higher functions and their relationships" (as cited in Wertsch, p. 61).

Parker and Goicoechea (2000) indicate that the conceptions of the sociocultural approach to human cognition "are generally traced to Vygotsky, Leontiev, Luria and others. . . . From this perspective, cognition 'is a complex social phenomenon'. And learning is 'an integral part of a generative social practice in the lived-in world'" (p. 229). Schwandt (2000) maintains that "constructivism means that human beings do not find or discover knowledge so much as [they] construct or make it" (p. 197). In addition, he emphasizes the importance of social interaction to learning when he says, "we do not construct our interpretations in isolation but against a backdrop of shared understandings, practices, language and so forth" (p. 197).

Wink and Putney (2002) view the value of Vygotsky's pedagogical work as stemming "from the very way in which he viewed learning and development as dynamic processes, social, cultural, and historical by nature, and in dialectical relationship with each other" (p. 62). They point out that "from a Vygotskian perspective . . . the sociocultural context is very complex" (p. 63). According to Parker and Goicoeachea (2000) there are six key themes that describe the sociocultural theory:

- the human person is not a natural entity but a social and historical product
- the formation and transformation of the person can only occur in a social context that is constitutive of being
- the relation between social context, people, and things is sustained and transformed in practical activity

- the person is formed not only in practical activity, but in the human relationships this activity sustains
- the person, constituted in activity and relationship in social context, is fundamentally split . . . the person's relation to self, to others, to activity, and to the world is constituted and mediated by discourse and social practices
- the person strives to achieve identity. (pp. 231–234)

Wink and Putney (2002) emphasize that "the primacy of the social world surrounding us, how it affects us, and how we affect it, is fundamental to understanding Vygotsky's legacy" (p. 64).

Bodrova and Leong (2007) summarize the basic principles which underlie the Vygotskian framework in the following way:

- Children construct knowledge
- Development cannot be separated from its social context
- Learning can lead development
- Language plays a central role in mental development

Like Vygotsky, John Dewey viewed the mind and its formation as a communal process. Greene (1994) acknowledges Dewey as "recognizing the multiplicity of possible meanings [and viewing] knowing as primarily a search for meaning" (p. 435). She claims that the view involves "a refusal of linearity and abstractness, as well as a rejection of universalist certainties" (p. 435). Greene later relates Dewey's ideas to researchers who must take into account "what happens as articulated by students, teachers, administrators,

all who are involved. All this connects not only with what we now view as qualitative research but with what we also recognize as constructed reality" (p. 435).

The theories of Vygotsky (1978), Piaget (1951/1962), and Dewey (1990) all inform this research on musical play, peer and teacher interactions, and scaffolding. Foremost in the conceptualization of this research are Vygotsky and his theory of the zone of proximal development and Wood, Bruner, and Ross' (1976) notion of scaffolding within the zone of proximal development.

Jean Piaget's Theory of Cognitive Development

Jean Piaget, the Swiss cognitive theorist, has significantly influenced the contemporary field of child development. According to Berk (2006), North American educators had known of his work since the 1930s but because many of his ideas were at odds with the dominant theory of behaviourism, his work was not given much attention until the 1960s. His early training as a biologist influenced Piaget and "central to his theory is the biological concept of adaptation. Just as structures of the body are adapted to fit the environment, so structures of the mind develop to better fit with or represent the external world" (Berk, p. 21). Parker and Goicoechea (2000) also point out that Piaget was strongly influenced by Kant who believed that "our experience of the world [is] objective and certain" (p. 228).

According to Parker and Goicoechea (2000), "Piaget took from Kant this basic insight that the knower is active and added a developmental dimension" (p. 228). Piaget conceived a theory of how children cognitively develop based upon studies of his own

children. Educators have used the cognitive framework, developed by Piaget, extensively in planning and implementing curriculum for young children. According to Greata (2006), Piaget's theory of cognitive development was "one of the first and most significant contributions to early childhood education and continues to be an influence on the field" (p. 8). Piaget rejected the notion that learning was a passive assimilation of given knowledge and proposed instead that learning is a dynamic process comprising successive stages of adaptation to reality during which learners actively construct knowledge by creating and testing their own theories of the world (Piaget, 1968). According to Piaget (as cited in Andress, 1998), each stage of learning and development prepares the child for the subsequent developmental stage and children "actively construct mental schemas as they progress through [these] four broad stages" (p. 3).

There is widespread agreement that the ideas of Piaget "stand as one of the dominant twentieth century positions on cognitive learning" (Andress, 1998, p. 7). According to Berk (2006) Piaget is credited with constructivist-based learning in which children are presented with a variety of activities designed to promote exploration; a sensitivity to children's readiness to learn where teachers watch and listen and are careful not to impose new skills before children are ready; and an acceptance of individual differences but with a regard for the idea that some children go through the same sequence of development but at different rates.

Although Piaget's cognitive development theory is now no longer fully accepted, it is acknowledged that his findings served as a starting point for many lines of research on cognitive development. "Critics point out that Piaget's stagewise account pays

insufficient attention to social and cultural influences" (Berk, 2006, p. 22). It is with regard to this view of the place of cultural and social influences on the thinking of children that Vygotsky and Piaget are not in agreement. Piaget viewed learners as actively constructing knowledge but did not view the social aspects of learning as important.

Piaget (1951/1962) addressed the subject of play and maintained that play performs a major role in the child's growing mental abilities. He indicated that play is "an activity for pleasure [with a] relative lack of organization" (p. 148). He viewed play in stages beginning with practical or functional play in which children repeat observed activities, moving on to play in which objects stand for other objects (this stage also includes dramatic play), and finally concluding with games governed by rules. Wood and Attfield (1996) conclude that Piaget believed that:

> play promoted assimilation rather than accommodation, thereby consolidating newly learned behaviours. Therefore playing was not the same as learning but could facilitate learning by exposing the child to new experiences and new possibilities for acting in and on the world. Thus play was not seen as a leading source of learning and development, but could actively contribute to these processes. (p. 40)

Lev Vygotsky and the Socio-Cultural Theory of Learning

Vygotsky was born in Russia in 1896, the same year as Piaget. He began his work in psychology shortly after the Russian Revolution, when Marxism replaced the rule of

the czar. The philosophy of Marxism emphasized socialism which encouraged sharing and cooperation. A heavy emphasis was placed on history and there was a belief that culture could be understood only through examination of the ideas and events that shaped it (Vasta, Haith, & Miller, 1995).

Although much of Vygotsky's writing was accomplished in the early part of the 20th century, his work was virtually unknown in America until his monograph, *Thought and Language* was published in 1962 (Vygotsky, 1978). His untimely death from tuberculosis in 1934 may have been one of the reasons that his writings were not acknowledged earlier in the western world. During recent decades there has been a dramatic increase in studies that relate specifically to his theories regarding the impact of cultural context in the lives of children.

The ideas of Vygotsky (1978) concerning language, social interactions, and play contribute to his sociocultural theory. Berk (2006) informs us that Vygotsky's "perspective is called sociocultural theory [because it] focuses on how culture—the values, beliefs, customs, and skills of a social group, is transmitted to the next generation" (p. 25). Schribner (as cited in Parker & Goicoechea, 2000) identifies three key aspects of the sociocultural approach to human cognition: "Cognition is culturally mediated by material and semantic artifacts such as signs and symbols, it is founded in purposive activity, . . . and it develops historically as changes at the sociocultural level impact psychological organization" (p. 229). Vygotsky (1978) viewed "learning as a profoundly social process [which] emphasizes dialogue and the varied roles that language plays in instruction and in mediated cognitive growth" (p. 131). He emphasized the

importance and value of cooperative dialogues between children and more knowledgeable members of society.

The zone of proximal development is regarded by many as one of the most well-known of all of the concepts introduced by Vygotsky (Bodrova & Leong, 2007). Bodrova and Leong describe it as "a way of conceptualizing the relationship between learning and development [and they maintain that] Vygotsky chose the word zone because he conceived development not as a point on a scale, but as a continuum of behaviors" (p. 40). Vygotsky (1978) defined it as "the distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (p. 86). He insisted, "what is the zone of proximal development today will be the actual development tomorrow" (Vygotsky, 1978, p. 87).

Vygotsky (1978) believed that knowledge is socially constructed and fully believed that it is not simply constructed but co-constructed. He argued that Piaget had overlooked the essential social nature of language and therefore failed to understand that learning is a collaborative process. Vygotsky and Piaget viewed learning and development in very different ways. Wink and Putney (2002) summarize these differences in the following way: "For Vygotsky, learning first and then development. For Piaget, development first and then learning" (p. 23). Vygotsky (1978) insisted that "while learning systems may be similar among children at certain phases of their developmental process, these systems cannot be identical for all children because of their differing social experiences" (Wink & Putney, pp. 23–24).

John Dewey's Pragmatism and Social and Experiential Nature of Learning

The American philosopher, psychologist, and educational reformer, John Dewey, lived from 1859 to 1952. He has significantly influenced educational thought, both in America and around the world. Dewey is known for his leadership of the progressive movement in American education during the first half of the 20th century.

Like Vygotsky, Dewey was influenced by Hegel and Marx. He was a prolific writer and "his writings never lost an enthusiasm for the dynamic, the vital, and the progressive" (Blackburn, 2005, p. 98). In many of his writings, including *My Pedagogic Creed* and *Experience and Education*, he acknowledged the social and the experiential as being equal partners in the education of children. He viewed the education process as having two sides—one psychological and one sociological and maintained that the connections the educator makes with the initiatives of the child as vital to education. He had great respect for the child as a social individual and insisted that the school is primarily a social institution. He viewed education as a process of living, not a preparation for future living (Dewey, 1929). Democracy in education was also a topic of discussion in many of his writings. He viewed democratic social arrangements as promoting a "better quality of human experience" (Dewey, 1938, p. 34).

In addressing teaching methodologies, Dewey (1897) emphasized the importance of the "development of the child's interests and powers" (p. 13). He pointed to the significance of the activities, expression, and movement of children and the value of

"constant and careful observations of interests [as being] of utmost importance" (1897, p. 15). Dewey saw education as "the fundamental method of social progress" (1897, p. 16).

The beliefs of all three educational theorists, Piaget, Vygotsky, and Dewey, work together to inform the theoretical framework which direct my study: Piaget's view of the child as an active constructor of knowledge, Vygotsky's acknowledgement of the importance of the social aspect of learning and the expanded view of the child as not only a constructor of knowledge but a co-constructor of knowledge in the social world, and Dewey's view of the child within a democratic society that acknowledges the partnership between the social and experiential aspects of learning. The social nature of play and the role of play in learning within the zone of proximal development are key in the theoretical and conceptual framework of this research. It is from this social constructivist perspective that I have built this study.

Background to the Research Questions

The importance of play as a vital and vibrant teaching strategy in the early childhood classroom has been acknowledged and its absence in early childhood music teaching practice and programs has been documented (Jordan-Decarbo & Nelson, 2002; Morin, 2001; Smith, 2005). Possibilities that address musical play and its inclusion in early childhood music experiences are being explored and advocated by leaders in the field (Berger & Cooper, 2003; Littleton, 1991; Morin, 2001; Smithrim, 1997). Given the reawakening of these ideas through enthusiasm created by some recent research in the area of musical play and the inclusion of musical improvisation in the early childhood

classroom (Berger & Cooper, 2003; Gluschankof, 2005; Jackson-Gough, 2003; Nilsson, 2002; Smith, 2005; Smithrim, 1997; Young, 2003a, 2004), it is important to now address the role of the teacher and the more knowledgeable peer in scaffolding learning within the musical play environment. According to Vygotsky (1978), it is through play that children create the zone of proximal development. Wood, Bruner, and Ross (1976) point to scaffolding within the zone of proximal development as significant in enabling the novice to perform at a higher level (Bodrova & Leong, 2007). Therefore, if play is acknowledged as a leading activity in the development of understanding and in the creation of the zone of proximal development in pre-school and Kindergarten children as indicated by Vygotsky (1978), and if scaffolding plays a vital part in responding to children within the zone of proximal development then, for musical play to be acknowledged as an essential part of the early childhood music program, the issue of scaffolding within a musical play environment must be addressed.

Research Questions

My research will examine scaffolding within the context of musical play. Findings will contribute to extending understanding within the early childhood and music communities regarding the possibilities available to children and educators when scaffolding is used during times of musical play. Limited understanding of the role(s) of the teacher and peers during musical play combined with concerns from the early childhood and music teaching community regarding the place of play in the early childhood music classroom (Morin, 2001; Smithrim, 1997) serve as the basis for the

following research questions that guide this dissertation research: 1) *How do young children scaffold their own and their peers' musical growth and understanding during musical play?* and 2) *How do early childhood educators scaffold young children's musical growth and understanding during musical play?*

Definition of Terms

This study was approached from a social constructivist perspective. Terms which are significant to this study are defined in the following ways:

Zone of Proximal Development:

> *The distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers* [emphasis in original]. The zone of proximal development defines those functions that have not yet matured but are in the process of maturation, functions that will mature tomorrow but are in an embryonic state (Vygotsky, 1978, p. 86).

Scaffolding: A "process that enables a child or novice to solve a problem, carry out a task or achieve a goal which would be beyond his unassisted efforts" (Wood, Bruner, & Ross, 1976, p. 90). This is further explained by Bodrova and Leong (2007) as

> the process of providing, and gradually removing external support for learning. During scaffolding the task itself is not changed, but what the learner initially

does is made easier with assistance. As the learner takes more responsibility for performance of the task, less assistance is provided. (pp. 211–212)

Shared Activity: This concept is based upon "Vygotsky's ideas that mental functions can be shared; that is, they exist in shared activity. A mental function exists, or is distributed, between two people before it is appropriated and internalized" (Bodrova & Leong, 2007, p. 79). During shared activity there is a recognition of the zone of proximal development and assistance is provided at the higher levels of the zone of proximal development. The following are examples of shared activity as described by Bodrova and Leong: a child using a strategy or concept with the support of another person, two children working together to solve a problem, one child asking a question while the other child answers, teachers creating different types of assistance within different types of shared activity. Shared activities include adult-child interactions as well as "child interactions with peers and other partners" (Bodrova & Leong, p. 80).

Assisted Performance: The maximum level of performance which can be reached within the zone of proximal development because of assistance from an adult or more knowledgeable peer as opposed to independent performance which lies in the lower level of the zone of proximal development. "Between maximally assisted performance and independent performance lie varying degrees of partially assisted performance" (Bodrova & Leong, 2007, p. 40). Assisted performance can occur through directed and supportive interactions which are formal or informal as well as any type of social interactions e. g., interactions with peers as equals, with imaginary partners, or with children at other developmental levels (Newman & Holzman, as cited in Bodrova & Leong).

Play: Interaction that involves explicit roles and implicit rules; the leading activity for pre-school and Kindergarten children (Bodrova & Leong, 2007).

Musical Play: Young children's interactions within the context of play that involve their unrestricted selection and use of music, music materials (e. g., musical instruments, recorded music), music activities (e.g., singing, dancing, playing instruments) and other materials (e. g., toys, puppets, costumes) to extend and enhance their musical experiences and understanding.

CHAPTER TWO:

RELATED LITERATURE

Play

> Play is the source of laughter and humor, of inventiveness and beauty. It allows us to entertain possibilities and to envision the future. It helps us to persevere in our efforts and to explore the full range of our emotions. It fosters the spontaneity of joy that makes us truly human. (Van Hoorn, Monighan-Nourot, Scales, & Alward, 2003, p. 22)

Play, according to Pelligrini and Boyd (1993) is, "an almost hallowed concept for teachers of young children" (p. 105). In the past, play has been defined and described in many different ways: free, pleasant and voluntary, trivial, nonproductive, spontaneous, aimless, and amusing. Gilmore (1971) however, states, "the person who wishes to understand play behavior has set himself a difficult task" (p. 311). Moyles (1994) agrees, suggesting that defining play is like "trying to seize bubbles" (p. 5).

Historically, play has been theorized:

> since the time of the ancient Greeks, [however] the ancients do not give us a clear rationale for considering the play of children . . . and it [was] not until centuries later that we begin to see the emergence of a unique set of ideas about children's play. (Frost, Wortham, & Reifel, 2001, pp. 7–8)

According to Fleer (1999), "prior to Rousseau's work, play was not given serious consideration [and] many theorists and philosophers either ignored this area entirely or

considered it merely practice work" (p. 69). She maintains that since 1870, three main values in the study of play have been identified: cognitive, emotional, and social.

During the 19th and early 20th centuries, scientific views of play emerged. Groos (1898/1978) regarded play as preparation for life and practice for future adult activities. Hall (1908/1978) conceived of a theory of recapitulation and regarded "play as the motor habits of the past, persisting in the present" (p. 24). He felt that play imitated the past, a metaphor, which according to Frost et al. (2001), is "now discounted" (p. 17).

Interest in the study of children during the end of the nineteenth century and the beginning of the 20th century led to research in the area of play. Cohen (2006) identifies three traditions of play that developed during this period of time: psychoanalytical, educational, and developmental. The psychoanalytical tradition developed by Freud (1922/1961) and his followers, Walder (1933/1978) and Erikson (1963), regarded play as having an "important role in normal development, as a mechanism in childhood for resolving the pressures a child feels when drives are being curbed by society" (Frost et al., 2001, p. 39). Erikson (1963) emphasized the importance of play on the inner life of the child. He maintained that "the playing adult steps sideways into another reality; the playing child advances forward to new stages of mastery" (p. 220).

The Nature of Play

The nature and essence of play have been carefully considered and extensively discussed by philosophers and theorists including Huizinga and Gadamer. The Dutch historian and linguist Huizinga (1950) regards play as having the qualities of being

"profoundly aesthetic" (p. 2) and "primordial" (p. 3). He indicates that the element of fun "characterizes the essence of play" (p. 3). He regards activity associated with play as having the following qualities: special, significant, and social (p. 4) as well as voluntary and free (p. 7–8). For Huizinga the progression of play is comprised of "movement, change, alternation, succession, association, separation" (p. 9) and he regards repetition as "one of the most essential qualities of play" (p. 10). He further elaborates by indicating that play, "in its more developed forms . . . is saturated with rhythm and harmony, the noblest gifts of aesthetic perception known to man" (p. 7).

Huizinga (1950) speaks of play as being separate from "ordinary life" (p. 19) and that it "moves and has its being within a playgound marked off beforehand either materially or ideally, deliberately as a matter of course" (p. 10). He speaks of play as having an "air of secrecy" (p. 12) which is "expressed in 'dressing up' . . . [where] the individual 'plays' another part, another being. He *is* [emphasis in original] another being" (p. 13).

In his discussion of the relationship of music and play, Huizinga (1950) maintains that "play . . . lies outside the reasonableness of practical life; has nothing to do with utility, duty or truth. All is equally true of music" (p. 158). He insists that "dancing is a particular and particularly perfect form of play" (p. 165) and claims that action is essential to play, "for where there is no visible action there can be no play" (p. 166).

Gadamer (1989) speaks extensively about the quintessence of play and argues that "play has its own essence, independent of the consciousness of those who play" (p. 102). He, like Huizinga, maintains that movement is vital to play and compares it to dance with

its "to-and-fro movement" (p. 103). For Gadamer, play "is not tied to any goal [and is renewed] in constant repetition" (p. 103). He also claims that play is effortless (p. 104).

Self-presentation is acknowledged as the "first and foremost" (p. 108) characteristic of play by Gadamer (1989). He emphasizes that the player's conduct is "tied to the make-believe goals of the game" (p. 108). However, he indicates that "the 'meaning' of these goals does not in fact depend on their being achieved" (p. 108) and that children essentially "play for themselves, even when they represent" (p. 109). He agrees with Huizinga regarding the importance of the existence of the playground when he insists that, "Human play requires a playing field" (p. 107). Hakkarainen (2006) further explains when she says, "Play . . . gives children a stage for experimenting with sense making, emotional experiences, imaginary need states, and motivations" (p. 191).

In summary, Huizinga and Gadamer are in agreement regarding many aspects of the nature of play. Both agree that play requires a playing field or playground. They acknowledge the importance of action or movement in play and regard the movement of play as being similar to the to-and-fro movement of dance. To these philosophers, play has no specific goal and play is seemingly without effort. Imagination and make believe are recognized by Huizinga and Gadamer as essential characteristics of play.

Play and Education

Play has a long history in early childhood education and has been pedagogically approached in many ways. Pestalozzi (1746–1827) is regarded as a leader in early childhood education and, according to Gutek (1968), is acknowledged as "one of the

Western world's leading educational thinkers" (p. x). He is credited with educational innovations that are associated with democratic commitment to universal education along with the "development of a method of object teaching in which children explored their immediate environments" (p. x). Pestalozzi (1898/1977) emphasized his beliefs regarding the value of the child's active involvement in learning and the essential role of the teacher when he stated,

> As a child, left to itself, peeping into the world without understanding, sinks daily from error to error, through the confusion of separate scraps of knowledge which he has found while so groping; so, on the contrary, a child who is led on this road from his cradle rises gaily from truth to truth. (p. 253)

His acknowledgement of the value of experience in education is confirmed by Gutek (1968) who remarks, "among the Pestalozzian contributions to educational theory was his stress on beginning instruction with the learner's experience, on using all the educational possibilities found in the environment, and on maintaining a continuum of experience in organizing instruction" (p. 99). Howe, Jacobs, and Fiorentino (2000) indicate that Pestalozzi believed "children learn best through active interaction with the sensory and physical environment in a self-directed way" (p. 210). Although play is not specifically addressed in his writings, many scholars consider that the work of Pestalozzi influenced current educational thought regarding teaching strategies that include hands-on activities and concrete materials which assist children in moving from simple to complex and from the immediate world to the unfamiliar (Howe et al., 2000). According to Kendall (1986), Pestalozzi asserted that "the *development of powers the child possesses* [emphasis in

original] as the chief aim of education [and] thus the teacher's primary educational resource is the potential capacities and faculties of each child" (p. 37).

The famous German educator and founder of the Kindergarten, Friedrich Froebel (1782–1852), visited Pestalozzi's schools (Howe et al., 2000, p. 210). He addressed the place of play in the education of children more specifically than Pestalozzi. Froebel (1912) indicated that,

> parents and family should regard contact with nature as one of the chief moving forces of the life of the child, and should make it as full and rich as possible. And the best means is play, for at first play is the child's natural life. (p. 50)

Froebel (1912) considered play to be a "copy of human life at all stages and in all relations [which] induces joy, freedom, contentment, inner and outer repose, and peace with all the world" (p. 50). He, like Pestalozzi, regarded activity as vital in the education of children and said, "True education must originate in activity and must similarly be both instructive and creative and must provide for climax and consolidation in the creative process" (Lilley, 1967, p. 43). Froebel considered play to be a necessary part of the education of the young child and states, "So play, like learning and activity, has its own definite period of time and it must not be left out of the elementary curriculum" (Lilley, p. 167). Froebel's Kindergarten curriculum was "heavily child-centred with a focus on play, spiritual feelings, and self-directed activities, which created a pleasant environment for children" (Howe et al., 2000, p. 210). Saracho and Spodek (1998) maintain, however, that "play in the Froebelian kindergarten was highly teacher directed" (p. 4).

Maria Montessori (1870–1952) was an Italian educator who worked with mentally disabled and poor children in the slums of Rome "to provide early education experiences for preschoolers" (Howe et al., 2000, p. 212). Wood and Attfield (2005) view Montessori as placing less emphasis than Froebel on the child's natural tendencies for free play, exploration, and fantasy and as regarding "fantasy play as trivial and patronizing to the child" (p. 30), even though she provided a child-sized environment in which children could learn and practice the skills of life. Montessori (1973/1948) stated that "a limited environment is suited to the small child" (p. 9). Orem (1974) indicates that Montessori believed that young children could learn naturally without instruction from adults. Howe et al. (2000), in their discussion of the role of the teacher in a Montessorian teaching environment, state, "the role of the teacher was to guide and prepare the environment for learning" (p. 212). Saracho and Spodek (1998) indicate that the educational method of Montessori "drew its essential elements from the children's natural play activities, reconstructed them, and systematized them in an instructional method" (p. 4). According to Howe et al. (2000) the curriculum associated with Montessori includes "little attention on creative development (i. e., art and music), emotional expression through pretend play, or opportunities for social interaction" (p. 213). Cohen (2006) maintains that Froebel and Montessori did not view play as valuable in its own right, but as a means through which children could be taught skills.

Piaget (1951/1962), the most well known of the developmentalists, regarded play as performing a major role in the child's growing mental abilities and emphasized that "play is an activity for pleasure [with a] relative lack of organization" (p. 148). He

suggested three stages for play development: the stage of functional play in which the child repeats observed activities; the stage of constructive play which involves the use of existing objects in the creation of new objects, as well as dramatic play; and the stage that involves games with rules, suggesting that there was a stage of play that occurs whenever a new learning is taking place. Saracho and Spodek (1998) indicate that from Piaget's constructivist perspective, "through play, individuals take information from the outside world and adapt that information to their already developed schemes of understanding" (p. 7). Dempsey and Frost (1993) claim "it was the work of Piaget that gave children's play its theoretical underpinnings as part of an interactive process in the child's development of social, cognitive, and physical abilities" (p. 307).

Vygotsky (1978), who is acknowledged by many early childhood educators as one of the most significant and foreword thinking theorists on play, advocated for a more integrated view of the value of play in the development of children than did Piaget. Vygotsky regarded "the influence of play on a child's development [as] enormous" (1978, p. 96) and believed that "through play the child achieves a functional definition of concepts or objects, and words become parts of a thing" (p. 99). The imaginary aspect of play is key to Vygotsky's (1978) understanding of play. According to Vygotsky (1978) play has three components:

- Children create imaginary situations.
- Children take on and act out roles.
- Children follow a set of rules determined by specific roles (Bodrova & Leong, 2007, p. 129).

Vygotsky (1978) maintains that pleasure is not the defining quality of play, instead

> play seems to be invented at the point when the young child begins to experience unrealizable tendencies. . . . To resolve this tension, the preschool child enters an imaginary, illusory world in which the unrealizable desires can be realized, and this world is what we call play. (p. 93)

He acknowledges the imaginary situation as the "defining characteristic of play" (p. 94). Vygotsky (1978) disagrees with Piaget (1951/1962) who sees play through a developmental lens where the development of games with rules occurs at stage three of play development, which is marked by the child's use of external rules to initiate, regulate, maintain, and terminate social interaction. In contrast, Vygotsky (1978) suggests that "there is no such thing as play without rules" (p. 94). He clarifies his position by stating, "The imaginary situation of any form of play already contains rules of behavior, although it may not be a game with formulated rules laid down in advance" (p. 94).

Vygotsky (1978) also emphasizes that "play continually creates demands on the child to act against immediate impulse" (p. 99). He insists that "a child's greatest self-control occurs in play" (p. 99). According to Vygotsky (1978) play is "not a predominant feature of childhood but is a leading factor in development" (p. 101). Bodrova and Leong (2007) explain that it was Vygotsky's belief that play promotes cognitive, emotional, and social development which in turn serves as a tool of the mind, enabling children to master their own behaviours. Vygotsky's (1978) well-documented statement, "play creates a zone of proximal development in the child. In play, a child always behaves beyond his average age, above his daily behavior; it is as if he were a head taller than himself" (p.

102) reminds educators that, through play, children are able to reach past themselves and their chronologically related developmental age. Bodrova and Leong illustrate the significance of play within the zone of proximal development through the following example: "In a 4-year-old's play we can observe the abilities of attention, symbolizing, and problem solving at a higher level. We are actually watching the child of tomorrow" (p. 133). Van Hoorn et al. (2003) maintain "Vygotsky's most important contribution to understanding play and development is his assertion that every function in development occurs first at the social level and then at the individual level" (p. 30).

Bodrova and Leong (2007) indicate that followers of Vygotsky insist that development is influenced by play in the following ways:

- Play creates the child's zone of proximal development for many areas of intellectual development.
- Play facilitates the separation of thought from actions and objects.
- Play facilitates the development of self-regulation.
- Play impacts motivation
- Play facilitates decentration. (p. 131)

Contemporary Views of Play

Contemporary educators, scholars, and theorists continue to define, discuss, and deliberate play and its role in the education of young children. Ellis (1973) regards play as "the behavior emitted by an individual not motivated by the end product of the behavior" (p. 2). Sylva, Bruner, and Genova (1976) agree and claim that, "The essence of

play is the dominance of means over ends . . . in play the process is more important than the product" (p. 244). A common conception of play is that it is a child's work. However, Spodek and Saracho (1988) remind us that, "too often the basic concern with play is denied by suggesting that play is something else . . . and by calling play, work, it becomes serious and scholars can be serious about it and maintain their professional self esteem" (p. 9). They point to the legitimacy of play and advocate for play to be accepted in its own right and for its own value. In their study of the role of play in the problem solving of 3- to 5-year-old children, Sylva et al. (1976) regard play as being voluntary in nature and say, "The player is free from environmental threats and urgent need. Play behaviour is self-initiated. The sulky child forced to 'play' a maths game is not really at play" (pp. 244–245). Bodrova and Leong (2007) also remind us that often play is regarded as the opposite of work, "that it is something enjoyable, free, and spontaneous [but] this view of play . . . denies the importance of play in the development of young children" (p. 129).

Corsaro (1997) contends that "play is the primary matrix for socialization in childhood" (p. 39). Harley (1999) maintains, "children's play is a very personal experience and purposeful activity" (p. 17). Glover (1999) asserts that through play "children actively explore their world, they build on what they already know and do in order to gain new understanding and skills" (p. 6). She acknowledges play as an important aspect of children's construction of knowledge. Frost (1984) describes play as

a

> multifaceted phenomenon [with a] rapidly accumulating body of information [that] gives a substantial basis for proposing an integrated theory of play . . . [which would] provide a comprehensive description of the qualities of play, point out interrelationships between those qualities, open up creative possibilities for the design of play environments, and serve as a sounding board . . . for selecting play materials.(p. 17)

Play and Culture

Play is strongly related to culture. Rogoff (2003) suggests the structure of children's learning opportunities are cultural in nature. She indicates that in some communities children

> have the opportunity to learn by observing and pitching in to mature activities [whereas in others] children are separated from the mature activities of their community and instead do exercises at home and at school to prepare them for their later entry into the adult world. . . . Instead of children joining adult activities, adults engage with children by entering into child-focused activities such as play and conversations on child oriented activities. (p. 366)

Rogoff (2003) reminds us of the importance of viewing the culture of differing communities in light of their understanding of the place and value of play within the specific community. "Communities vary in expectations regarding whether parents or other people will serve as playmates in addition to being caregivers of young children" (Rogoff, 2003, p. 121). Wood and Attfield (2005) agree and note that a "key principle in

early childhood education is that adults should pay attention to children's existing experiences, and build on what they know within the context of their family and cultural backgrounds" (p. 189). They indicate that failure to do this can result in "mismatches between the learner and the curriculum" (p. 189). Roopnarine, Lasker, Sacks, and Stores (1998) emphasize the need for educators to be aware of the differing views of the place of play in early childhood educational practices when they state,

> efforts to introduce play in a formalized curriculum must contend with different aspects of the child's sociocultural environment . . . Play themes and materials should reflect the cultural niche with the goals of fostering cultural identity and human dignity. (p. 209)

Berk and Winsler (1995) confirm this view when they say,

> all children in all cultures do not face identical tasks. Instead, cultures—and the institutions within them responsible for socialization—*select* [emphasis in original] different tasks for children's learning. As a result children's cognition is *contextualized;* [emphasis in original] it emerges out of and derives meaning from particular activities and social experiences. . . . according to sociocultural theory, forms of thinking assumed to develop universally in early and middle childhood are much more a product of specific contexts and cultural conditions than was previously believed. (p. 18)

Roopnarine et al. (1998) indicate that "play has become an integral part of the early childhood curriculum in the developed countries of the world and it is gradually being integrated into educational efforts in societies that have historically embraced a rigid

academic curriculum for young children" (p. 195). Woodhead, however, reminds us that "those involved in early childhood development must recognize that many of their beliefs about what is best for children, are cultural constructions" (as cited in Dahlberg, Moss, & Pence, 1999, p. 162).

Musical Play

Introduction

Musical play, according to Littleton (1991) is the merging of the art of music and the art of play "to provide a unique pathway to learning" (p. 9). Support for musical play can be found in a variety of music education writings. Kenney (1995), for example, claims that,

> by providing children with free time, safe space, and musical materials, and by rethinking our roles as teachers we may be doing more than allowing children free rein with sounds . . . we may be helping them explore a whole new world of musical expression outside the current tradition. (p. 37)

Campbell and Scott-Kassner (2006) maintain that "the songs children know, invent, and transmit to each other while at play and . . . the music they create on instruments during free-play time" (p. 22) make a significant contribution to music learning. According to Tarnowski (1999), the learning and development of children can be enhanced by teachers who encourage musical play. Taggart (2000) acknowledges the importance of immersing children in "playful environments that are rich in singing, chanting, tonalities, meters, and movement" (p. 26). She suggests that children will then bring understanding "to the

music they hear and perform" (p. 26). Morin (2001), speaking to the lack of play practice visible in the music education field, states, "It is clear that children enjoy taking ownership of their learning and that play is an important, but neglected, part of the music teaching and learning process" (p. 27).

Historical Overview

Historically, musical play has been the focus of two landmark studies. Following World War I, Lowenfeld (1935/1991), a medical doctor interested in studying the positive aspects of the personalities of children, observed children at play. She believed that "playing is the most important way in which children set about ordering their universe as a prelude to the engagement of adult life" (p. v). The focus of her research was centred on children who were affected by the stress of World War I.

In the section of her research that focused on music in the play environment, Lowenfeld documented "the free expression of the child's response to sound, rhythm, melody, and movement, and the development of his capacity to create these for himself" (1935/1991, p. 34). Her observations took place in a musical environment in which the children were encouraged to participate in musical play. "The children may . . . move freely, and play and listen, and can combine music and movement" (Lowenfeld, p. 34). Lowenfeld (1935/1991) noticed that instruments provided a stimulus for the children to participate musically. She remarked, "musical instruments call forth a natural response in the children in the same way that is observed with the play material" (p. 34). However, she did not observe that the same was true for the children's use of movement. She noted

that this aspect was less consistent, for some children moved in the ways they had been taught in "games, drill, and dancing" (p. 34), some danced spontaneously to music, and some needed suggestions from the teacher, e. g., "the idea of a zoo in which they imitate animals" (p. 34).

Later in the century, between 1937 and 1951, a landmark study which addressed musical play (Moorhead & Pond, 1941–1951/1978) was carried out at the Pillsbury Foundation School in Santa Barbara, California. The originator of the study, Evan S. Pillsbury, appointed three trustees who subsequently contacted Dr. Leopold Stowkowski, noted musician and conductor, for advice regarding the project. According to Pond (1980), "he told them what he thought was most needed was an in-depth study of the spontaneous music and musicality of young children, and he suggested that they establish a school for this purpose" (p. 38).

A series of studies was subsequently implemented by composer Donald Pond and educator Gladys Evelyn Moorhead. Four separate ethnographic studies were conducted during the lifetime of the school and the findings were originally published under separate titles: *Chant*, 1941; *General Observations*, 1942; *Music Notation*, 1944; and *Free Use of Instruments,* 1948. In 1949, phonograph recordings, *Spontaneous Music of Young Children*, were added to the written collection of their findings.

Moorhead and Pond (1941–1951/1978) indicated that the primary purpose of the studies was to develop musical understanding in young children "by encouraging free musical expression, to discover the principles that govern children's relationship to music" (p. 3). The children were free to determine their own activities and play groupings

throughout the day. The researchers endeavoured to provide the children with a program that was well balanced and based upon "the best contemporary educational practice and knowledge of child development" (p. 3). They created an environment that was stimulating to the imagination by providing "unhampered opportunity for the exercise of imagination" (p. 3). This environment was established in order that "music might enter naturally into all the activities of the children's lives" (p. 3). Like Lowenfeld (1935/1991), musical materials were available alongside other non-musical objects.

The documentation regarding this research was made available under one cover in 1978. It is written in a style that includes rich descriptions, transcribed musical examples, interpretations, and philosophical writings concerning the findings. Discussion in Moorhead and Pond (1941–1951/1978) includes many issues with which contemporary early childhood music educators still wrestle. For example, they questioned the differences between the musical realities of children and the musical realities of adults. Moorhead and Pond (1941–1951/1978) criticized the insistence on the conformity of children to adult ideas of "simplicity and suitability" (p. 46) when they stated:

> adults are accustomed to recognize musical production of children according to arbitrary standards of their own which merely draw lines near the peak of the enormous body of their musical experience and production. Each adult draws this line to suit himself, rejecting most of what is real music for the child. (p. 32)

At the same time, however, they acknowledged the teacher's role in the child's music education, suggesting:

> We do not believe that the child can acquire all of his necessary equipment [i. e. understandings] solely by contact with music and music materials and by free opportunity to create in his own idioms . . . [and it is acknowledged that] teaching also has its place. Many necessary musical facts and techniques cannot be discovered. (p. 48)

Moorhead and Pond (1941–1951/1978) indicated many findings associated with the natural progression and sequence of melodic and rhythmic reading and writing and confirmed established understandings such as those associated with common elementary music teaching strategies (e. g., sound-before-symbol and rhythmic notation preceding melodic notation). They indicated "the child's deepest necessity . . . is not that he may be able to read and to interpret other composers' music but that he may be able to write his own" (p. 79).

In addition, Moorhead and Pond (1941–1951/1978) observed that, "when simple instruments are presented to young children, they are used as naturally as blocks or paints" (p. 93). These findings revealed that, "Music made by several children exploring instruments together has a new color and contrast and gradually becomes a musical language for the group" (p. 93). Observations also indicated that, under conditions of freedom, children "often play alone or with others for long periods" (p. 93), noting that "children showed increasing power to express their ideas and feelings in spontaneous music and to develop musical communication with one another" (p. 117).

Overall, the findings of the research of Moorhead and Pond (1941–1951/1978) had the capacity to be significant in informing music educators and researchers about the

possible place for play in the early childhood music setting. They found that such play had "a strongly social character" (p. 12), that to produce his own music the "child's first need is freedom" (p. 34), that music for young children is "primarily the discovery of sound" (p. 45), that children should "hear the music of their culture" (p. 47), and that "if music is to become a language for [children] they must not only hear it but make it their own by constant use" (p. 11). The researchers clearly acknowledged the importance of the place of freedom and exploration in the music education of children, the role of both individual and group experiences, and the role of the teacher as that of one who supports children in their construction of knowledge.

Interestingly, even though this groundbreaking study reflected many of the positive aspects of music learning in a playful, free environment, it appears that its findings made little impact on the music teaching practices of the day. As Wilson (1981) indicates:

> after the Pillsbury School ceased operation in 1948, there was little further examination of the vast implications inherent in the radical contention which infused the work of the school: that children possess innate musicality which assumes coherent form through the natural activities of childhood (p. 13).

Smithrim (1997) pointed to the effect of Moorhead and Pond's (1941–1951/1978) findings as "giving way to scientific pursuits of cognition" (p. 17). Littleton (1991) was in agreement when she claimed, "emphasis in quantification rendered the descriptive, anecdotal observations and analyses of the Pillsbury School's findings insignificant and unimportant" (p. 62).

Contemporary Research Findings

During the 1970s and 1980s there was evidence of renewed interest in the findings of the Moorhead and Pond (1978) study. In one such study at the University of Maryland's Center for Young Children, Foley (1978), initiated research concerning the natural musicality of young children and confirmed Moorhead and Pond's (1941–1951/1978) observations concerning children's musicality. This research also recognized children's interest in pursuing musical activities during free time and supported the belief that children are capable of purposeful sound construction in a safe, caring, and stimulating environment.

A decade later, Kalekin-Fishman (1986) observed Kindergarten children in two different countries, Germany and Israel, in order to determine how music was distributed throughout the school day and what was regarded as music and non-music. Although this study was not focused specifically on play, it did provide valuable insights into how the attitudes of teachers affect spontaneous sound production by children. The researcher noted, that "by not treating pupil-based sound and spontaneous motifs as possible components of music, teachers were actually narrowing the range of structured sound experience" (p. 62).

The findings of earlier musical play research (Foley, 1978; Kalekin-Fishman, 1986; Lowenfeld, 1935/1991; Moorhead & Pond, 1941–1951/ 1978) combined with the social constructivist view of the significance of the child's role in the construction of his/her musical understanding, prompted some researchers in the late 20th and early 21st

centuries to give a renewed look at musical play and its possibilities for children in early childhood music settings (Berger & Cooper, 2003; Gluschankof, 2005; Jackson-Gough, 2003; Littleton, 1991; Nilsson, 2002; Smith, 2005; Smithrim, 1997; Stevens, 2003; Tarnowski & Leclerc, 1994; Young, 2003a, 2004).

Littleton (1991), in her examination of pre-school children's music and play behaviour in two differing settings, suggested that there were three categories of musical play: functional musical play, constructive musical play, and dramatic musical play. She described functional musical play as the exploration of vocal, instrumental, and environmental sounds including how the sounds are produced. Constructive musical play was described as an extension of functional play when children begin to exhibit rhythmic and melodic patterns of sound and variations in dynamics and tone colour. The third category, dramatic musical play, was suggested to be the use of songs or instruments within a musical or nonmusical play theme.

Tarnowski and Leclerc (1994) examined how four different music-teaching styles (i. e., entertainer, director, responsive partner, and observer) might interact with children's musical behaviours during musical play. Results indicated children in groups with no adult intervention exhibited the most creative and sophisticated music behaviours. Young (2003b) confirms this when she indicates that children's play has a tendency to close down when teacher's interventions are overly intrusive or overly directive. On the other hand, play will be fostered and creatively extended when teacher interactions are perceived by children as being supportive and responsive.

Following a 13-week investigation of musical play with 4-year-old children, Smithrim (1997) observed that: free musical play enabled children to develop and demonstrate individual skills, interests, and abilities; children filled free time with industry and creative activity without guidance from the teacher; and children did not sing songs as a group or play traditional singing games. She noted a mismatch between the musical needs of children and the considerations of the institution as well as the challenge that teachers face when attempting to implement changes in teaching practice.

Nilsson (2002), in his research concerning the creative music making of Grade 2 children in a Swedish school, found that "young children are able to create music with form and structure" (p. 7) and pointed to play "as a significant cultural practice in relation to the children's creative music making" (p. 8). This study also revealed changes in Swedish music curricula from one that "stressed singing, listening, and musical theory [to one that emphasizes] music making, improvisation and composition" (p. 1).

In her observational study of New Zealand Kindergarten children, Jackson-Gough (2003) noted the regular occurrence of musical exploration in the holistic setting with the majority of music making taking place in informal, self-selecting contexts. She also observed the role of the teacher as a model for both singing and speaking.

Berger and Cooper (2003) observed and documented the musical behaviours of pre-school children alongside parents or caregivers in both free and structured musical play environments. Data revealed that children's play behaviours were influenced by the adult's valuing of all musical utterances made by the children and the adult's flexibility during structured music lessons. The "observations revealed that children engage in free

musical play during structured group sessions and also on their own, regardless of planned activities by adults" (p. 157). The researchers recommended that teachers be aware of the children's need to have both uninterrupted time for play and appropriate materials in the environment when incorporating musical play in a pre-school music program.

Within an American elementary school context, Stevens (2003), combined structured music lessons with occasional free time and realized that by allowing children ongoing episodes of musical play that they "hold a miraculous propensity for teaching themselves concepts and skills [that are] far beyond . . . expectations" (p. 44). She also emphasized that the "possibilities for music making can be endless if we provide them free time in the music room" (p. 45).

Young (2003a, 2004) reported research conducted in the United Kingdom regarding the spontaneous vocalizing of young children and the time-space structuring in spontaneous play on percussion instruments. Results revealed that teachers who carefully and thoughtfully observe the actions of children while they are engaged in play learn much about play and the impact that it has on the learning of young children. The researcher suggested "learning to observe, listen to and identify the forms of organization that underpin children's music-making helps practitioners to evaluate it positively, and consequently to be affirming and encouraging in their attitudes" (Young, 2003a, p. 56).

In an Israeli study of the self-initiated musical play of 4- to 6-year-old children, Gluschankof (2005) confirmed the predominating notion regarding the application of adult standards to the music making of children. She observed that "free play was

accepted in other areas, but in the music area . . . children needed the guidance of an adult . . . [and that musical self-initiated play] provides an opportunity for a quality learning experience that goes beyond what is possible in solely adult-directed music activities" (p. 332).

In my master's research (Smith, 2005) I observed and described the activities of 18 4-year-old junior Kindergarten children as they engaged in musical play over a 9-week period. Through ethnographic observation and data collection, I identified many of the children's activities as those which are often described as *skills* in music curriculum documents (e. g., singing, playing instruments, listening, moving, reading, writing, and composing). The children also used music as a stimulus for and during dramatic play.

The study also revealed that within a musical play environment, the observed children appreciated and enjoyed freedom of choice; joyfully explored the skills of music; used free music playtime fully and responsibly; challenged and encouraged their classmates; cooperated, assisted, discussed, and observed; concentrated for long periods of time; focused on their chosen activities without being distracted by the surrounding activity and noise; participated in a trusting environment; respected equipment and others' work; and scaffolded themselves and their classmates. Data indicated that the children developed skills associated with music literacy, cognition, creativity, and emotional and social development.

The analysis of the data allowed me to recommend the importance of including long periods of musical play as part of early childhood music experiences in order that children may develop many of the skills of music through social mediation with their

peers (Smith, 2005). I also suggested that during extended periods of musical play, teachers have opportunities to observe children's musical development and make curricular and planning decisions based on their observations.

Early Childhood Music Education Curriculum and Practice

Historical Influences

Music has been a part of early childhood education programs since Froebel first conceived of the Kindergarten. According to Kendall (1986) Froebel "valued happiness in children and he saw music as one of the prime means by which happiness could be engendered and expressed" (p. 45). Froebel saw music and art as being important parts of the child's daily routine. Howe, Jacobs, and Fiorentino (2000) indicate that in Canada, "Ontario was the leader in introducing kindergarten programs and by 1887, officially supported programs for 4- and 5-year-olds in many public schools" (p. 211). Corbett (1980) adds that, "By the turn of the century Froebelian ideas were helping to change the face and character of Canadian education" (p. 14). Music played an important part in the Froebelian Kindergarten and was a regular part of each day's activities. According to Corbett (1989), "The songs and singing games were recognized as one of the most attractive features of the Froebelian kindergarten" (p. 61). She notes, that

> with Froebel the words of the songs and games were yet another way of helping the child to understand his world. They also believed that music had a spiritual significance in that it reached into the child's heart and spirit. (p. 61)

Music in the Froebelian Kindergarten was generally found in structured, teacher-directed activities such as rhythmical movement in the form of marching around the room in time with musical accompaniment, piano accompaniment of songs, simple chords played on the piano to indicate time for a change in activity (a transition device), singing questions and answers in the opening circle time, singing the national anthem, the use of songs to assist children in understanding ideas and vocabulary, rhythmic movement related to nature (e. g., children might move as if they were trees budding out in the spring), moving to recordings, listening to recordings to develop an appreciation for musical sounds, and rhythm band (Corbett, 1980). "Froebel's goal in education was the unique and full development of each child as a total being—physically, emotionally, socially, mentally, and spiritually" (Corbett, 1980, p. 37). The aspect of artistic and creative development is noticeably absent from Froebel's list.

Canadian early childhood music education practices have had many influences. During the time that Canada was being colonized "music education was directly tied to the needs of different religious groups" (Comeau, 1995, p. 11). Comeau (1995) informs us that throughout the nineteenth century and the first few decades of the 20th century, music classes consisted primarily of choral singing with methods imported from Europe. This also corresponds with Froebel's influence in early childhood education and his use of choral singing to encourage spirituality.

In the middle of the 20th century, the child study movement and progressive education began to influence the development of music curriculum for children. Two new educational trends arose: "music appreciation and active methods" (Comeau, 1995, p.

16). During this period of time Canada witnessed the influence and impact of the active methods approaches of Zoltan Kodaly of Hungary and Carl Orff of Germany. The teaching methods associated with these two men are still widely practiced today.

Green and Vogan (1991) indicate, that "Orff and Kodaly were influenced by the work of Dalcroze; all three dealt with the development of basic musicianship, but each had a different means of achieving his goals" (p. 335). Both Kodaly and Orff have expressed their thoughts and ideas concerning early childhood music education. Kodaly, in interviews and writings, acknowledges the importance and influence of freedom and play in the child's learning and yet this is not reflected in the pedagogical interpretations of his ideas regarding early childhood teaching practices. The method associated with Kodaly is systematic, detailed, and highly developmental in its approach. It has an emphasis on choral singing and is especially appealing "to teachers who value these aspects of music instruction" (Green & Vogan, 1991, p. 341). According to Comeau (1995) the Kodaly method often does not appear to reflect many of the philosophical beliefs that are central to current educational practices.

The Kodaly approach to music education has a strong emphasis on the place of singing within the music curriculum. Comeau (1995) indicates that, "the Kodaly approach is based on the fundamental principle that all music learning must first take place via the ear, not the intellect" (p. 43). Kodaly insisted that "vocal music and the vocal teaching of children is the right way to arrive at a broader understanding among people" (Kodaly, 1986, p. 23). He also maintained that "all reasonable pedagogy has to start from the first utterances of the child: rhythmic-melodic plays, games with many

repeated phrases" (Kodaly, p. 60). He strongly believed that play in the form of singing games was a very important beginning to the acquisition of musical understanding and claimed, "The lucky child who can take part in singing games has a great advantage over those who have never had an opportunity to do so whether in kindergarten or as free play with other children" (Kodaly, p. 60).

Following World War II, Carl Orff developed a series of educational broadcasts for Bavaria Radio. They were based on the musical practices (the Schulwerk) of a school that he and Gunild Keetman had initiated before the war. The teaching approach that became associated with Orff is based on learning through experience. Orff acknowledged the importance of music for young children and recognized that he was working in a new direction. Upon reflecting on the work that he had done prior to the war he realized that "the old Schulwerk . . . was not applicable to children" (Orff, 1978, p. 8). He claimed that, "All of a sudden the tragic interruption of my work became meaningful—I saw in a flash where rhythmic work really ought to begin: when a child enters school—or earlier still at preschool age" (Orff, p. 8). Kodaly expressed having a similar revelation related to the importance of music for young children, which he described as "the effect of a thunderbolt" (Forrai, 1975, p. 96).

Orff maintained that the pedagogy associated with his philosophy of music education was not a "method or ready-made system" (Orff, 1978, p. 1) and claimed that it is most suited to teachers who are "artistic in temperament and [have] a flair for improvisation" (Orff, p. 1). There is a developmental aspect to the approach but the Schulwerk does not "provide any book dictating the specific sequence for introducing the

musical elements" (Comeau, 1995, p. 43). It has been through the need to ensure a continuing place for music in the education of young children within school settings that scholars, researchers, and educators have developed sequential, pedagogical approaches to assist teachers in the realization of music programs and satisfy the demands of administrators and others who are responsible for the writing, implementing, and monitoring of music curriculum documents.

Pedagogical practices that are assoeiated with the Orff approach are often regarded as the more creative of the two approaches. For this reason it has also been the "object of much criticism: its lack of rigour and difficulty in developing basic skills and knowledge have often been condemned" (Comeau, 1995, p. 78). The place of play and the value of early childhood music experiences within the Orff tradition appear to be matters of interpretation related to pedagogical practices rather than direct quotations from Orff himself. Since Orff "never gave interviews" (Pruett, 2003, p. 190) we are limited to his writings and the interpretations of his work by others. Wuytack (1977) indicates that within the Orff philosophy

> activity should come first [and] the play element is needed—the play as children take it, with joy and earnestness . . . 'Play-music' is rich in content, as it can perform a real, elevating role in the life of music-making young people. (pp. 60–61)

Burnett (1977) reveals that "Orff recognized the value of play" (p. 145) and then she presents a view of the child through a developmental lens. Problematic connotations regarding views of children are held within phrases such as,

> learning is based on the sequential management of experiences appropriate to the process; Orff believed that the musical process was one which developed in stages; music for children is a process of internalization not one of intellectualization; we as educators must look at children not as potential performers but as potentially whole people. (Burnett, p. 144)

Linear views of learning and deficit notions of children such as Burnett has described are regarded by early childhood scholars Dahlberg, Moss, and Pence (1999) as ideas that "value(s) children primarily for what they will become" (p. 53) as opposed to what they are today.

Many educators regard the Orff approach as child-centred with a learning sequence that is based on "the child's natural stages of development" (Comeau, 1995, p. 42). Walter (as cited in Werner, 1991) points to Orff-Schulwerk as being

> in accord with the findings of Pestalozzi, Piaget, and Bruner . . . Great educators from Froebel to Piaget have always said that teaching was possible only if it addressed a child's powers at the right time and in the right order. (p. 8)

Others have viewed the child within the Orff music classroom from a broader perspective. For example, Werner (1991) maintains that because "children make music in their own way long before they receive musical instruction [that it is important for teachers to learn to understand the musical language of children and] to use it in their teaching" (p. 8).

The active approach of teaching music had taken hold in Canada in part because of the work of scholars and educators such as Johnston and Hall who enthusiastically

promoted these new approaches following their visits to Europe where they saw evidence of the successes associated with the Orff and Kodaly approaches. Green and Vogan (1991) note that Bissell, former music supervisor for various Canadian school boards, promoted the Orff approach and assured teachers that this approach was not the same as approaches that might allow children to participate in unfocused music activities. He stated,

> I know that many teachers share my skepticism of the various 'banging and blowing' systems of music education involving tonettes, toy harps, and rhythm band gadgets, because the sounds are not musical, the musical material employed is invariably trifling, and the end results are vague. (Green & Vogan, p. 335)

It appears that the new methods (i. e., Orff & Kodaly) were being promoted on the basis of their potential to provide structure to children's music education and ensure the development of music programs of worth. Green and Vogan also note that "Orff and Kodaly both advocated beginning music experience at an early age and have thus contributed to the development of early childhood education in music" (p. 342).

The approaches associated with the philosophies of Zoltan Kodaly and Carl Orff have made significant impact on the Canadian music education community since the middle of the 20th century. Although both Kodaly and Orff acknowledge the importance of early childhood education and play in education, aspects of play are rarely included in early childhood music classrooms that employ the methods of Kodaly and Orff. Instead, teachers continue to use structured, whole group approaches, which include systematic, detailed strategies aiming towards attaining music literacy skills. If play is incorporated

in early childhood music instruction it is generally included through the use of teacher-managed exploration of musical instruments and structured rule-based singing games.

Early Childhood Music Curriculum

The current music curriculum for early childhood programs in Alberta can be found in various documents including *The Alberta Education Program of Studies for Elementary Music* (1989) and the *Kindergarten Curriculum Overview* (2006). The two guides view music education very differently. In the 1989 document music is viewed as a separate subject in which the concepts, skills, and attitudes are approached in a systematic, sequential manner. On the other hand, the 2006 overview includes music as part of a unit of creative and cultural expression with little attention to the development of music skills and concepts.

The influence of the Developmentally Appropriate Practice movement, spearheaded by the American-based National Association for the Education of Young Children, is noted in the systematic, linear approach to music instruction within the 1989 document. This is evidenced by a specific sequencing of skills and concepts and reference to age-appropriate musical development. Smith (2007) notes that this curriculum document relies on the behaviourist views of Piaget, whose influence was strongly felt in the Developmentally Appropriate Practice Movement, and the vision of Dewey who saw experience as vital to learning. The influence of Vygotsky and his sociocultural theory is absent in this curriculum guide.

The 2006 early childhood document (Alberta Education) puts less emphasis on the development of music skills and knowledge and uses words such as *explores*, *becomes aware*, *experiments*, *begins to recognize*, and *participates* to describe the young child's involvement with music. Within the document there is continued evidence of the influence of Developmentally Appropriate Practice with the use of terms such as *age-appropriate behaviour* and the linear approach to learning that is communicated through the organization of the document. The inclusion of learner expectations also points to the long-standing influence of the Developmentally Appropriate Practice movement. There is no indication of the place of play as a component of early childhood music instruction.

The place of play within an early childhood music teaching environment is clearly absent from these two curriculum documents. However, national organizations such as the Canadian Coalition for Music Education in Canada along with the United States based Music Educators' National Conference both acknowledge the important place of play in the music education of young children. The Canadian Coalition for Music Education in Canada states, "frequent opportunities for experimentation and free play within a music environment are vital for four-year-olds" (2000, p. 16). The Music Educators' National Conference, in its publication, *The School Music Program: A New Vision*, notes the value of play as a part of music experiences for young children and states, "play is the primary vehicle for young children's growth . . . early childhood music experiences should occur in child-initiated, child-directed, teacher-supported play environments" (1994, p. 2). The provincial curriculum documents and the national music

education curriculum documents present conflicting views of the child as a learner and of the place of play in the early childhood music classroom.

The Zone of Proximal Development, Scaffolding, and Early Childhood Music Education

The Zone of Proximal Development

Vygotsky's influence on early childhood education and play is well documented (Vygotsky, 1978). One of Vygotsky's most important contributions to education is his notion of the zone of proximal development. Vygotsky (1978) defines this as "the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (p. 86). He clarifies this definition further when he says, "The zone of proximal development defines those functions that have not yet matured but are in the process of maturation, functions that will mature tomorrow but are currently in an embryonic state" (p. 86). Vygotsky (1978) emphasizes the importance of the social nature of learning and maintains that "human learning presupposes a specific social nature and a process by which children grow into the intellectual life of those around them" (p. 88). He further explains that "the notion of a zone of proximal development enables us to propound a new formula, namely that the only 'good learning' is that which is in advance of development" (p. 89). Vygotsky (1998) maintains that "in studying what the child is capable of doing independently, we

study yesterday's development. Studying what the child is capable of doing cooperatively, we ascertain tomorrow's development" (p. 202).

Vygotsky (1998) discusses the process for determining the zone of proximal development. He indicates that first

> we determine the actual level of their mental development. But we continue the study. . . . [when] we ask the child to solve problems that are beyond the limits of his mental age with some kind of cooperation and determine how far the potential for intellectual cooperation can be stretched for the given child and how far it goes beyond his mental age. (p. 202)

He continues to argue that if the principle of cooperation is applied to the establishment of the zone of proximal development "we make it possible to study directly what determines most precisely the mental maturation that must be realized in the proximal and subsequent periods of his stage of development" (p. 203).

Berk and Winsler (1995) remind us that "Vygotsky originally introduced the Zone of Proximal Development in the context of arguing against standard intelligence and achievement testing procedures and against theories related to development and education that emerge from the use of such tests" (p. 26). Vygotsky (1978) suggested that what should be measured is not what children know or do independently but rather what they have the potential to learn and do with the help of another person.

Many researchers and scholars have interpreted and explained the zone of proximal development. Berk and Winsler (1995) describe the zone of proximal development as

> the dynamic zone of sensitivity in which learning and cognitive development occur. Tasks that children cannot do individually but which can be accomplished with help from others invoke mental functions that are currently in the process of developing, rather than those that have already matured. (p. 26)

They claim that Vygotsky regarded the role of education as providing children with experiences that are in their zones of proximal development. These experiences would challenge children but could be accomplished with "sensitive adult guidance" (p. 26).

Lindfors (1999) describes the zone of proximal development as "that particularly promising cognitive area where a child can go further with another's help. This is where inquiry lives" (p. 20). She indicates that Vygotsky regards the zone of proximal development as a place of promise which the child controls. Lindfors also maintains that "the child 'knows' where he [sic] is, though he [sic] may not know that he [sic] knows it. But his [sic] inquiry act tells us where he [sic] is and wants to go, and brings us to that place to help him [sic]" (p. 20). She points out that it is neither what the child can do independently already, nor what is far beyond the child's current ability that is most promising for the child's learning at any given moment. Rather, the place of promise is that area just beyond the child's reach. Acts of inquiry occur at this very place. The child controls this *zone* through his or her acts of inquiry. Lindfors contends that Vygotsky's zone of proximal development

> is similar to what teachers sometimes call 'teachable moments.' [However,] the metaphors are different: Vygotsky's is *place* [emphasis in original] (a 'zone) and the teacher's is *time* [emphasis in original] (a 'moment'). . . . basic to both is a

> sense of a particular situation offering the opportunity for an adult to help a child go beyond—a sense that with a bit of a boost, the child will be able to then move forward on her own. (p. 255)

MacNaughton (2003) regards the zone of proximal development as a term "to describe the gap between a child's capacity to achieve results with and without skilled (adult) support" (p. 43) and acknowledges the importance of educators who are able to prioritize learning with others and who also have the ability to challenge children at the upper level of their zone of proximal development.

Vygotsky (1978) reminds us that

> an essential feature of learning is that it creates the zone of proximal development; that is, learning awakens a variety of internal development processes that are able to operate only when the child is interacting with people in his environment and in cooperation with his peers. (p. 90)

He points to the necessity for "extensive and highly concrete research based on the concept of the zone of proximal development" (p. 91).

The work of Vygotsky was not known in western educational circles until the 1962 English publication of *Thought and Language*. Bruner (1986) indicates that he first encountered discussions regarding Vygotsky and his notion of the zone of proximal development at an international congress held in Montreal in 1954 at which a large delegation of Russian scholars was in attendance. Bruner (1986) notes that even though at the time Vygotsky's work was "widely circulated in Russia . . . it was officially banned" (p. 71). The subsequent publication of both *Thought and Language* (1962) and *Mind in*

Society (1978) brought the ideas of Vygotsky to the western educational forefront and scholars such as Bruner, who had been earlier inspired by discussions concerning the work of Vygotsky, were now able to apply much of what Vygotsky said to the research of the day.

Bruner (1986) discusses the impact of the notion of the zone of proximal development on education and describes it as "an account of how the more competent assist the young and the less competent to reach that higher ground" (p. 73). In 1976 Bruner and his colleagues David Wood and Gail Ross began to research the role of the tutor (one who is more competent) in problem solving. This occurred 2 years before the English language publishing of *Mind in Society* in which Vygotsky defines the zone of proximal development, but several years after Bruner had initially had discussions with members of the Russian delegation to the Montreal congress regarding the writings of Vygotsky, including the notion of the zone of proximal development.

Scaffolding

History of the Metaphor

The origin of the term scaffolding as it is used in education is attributed to Wood, Bruner, and Ross (1976) who coined the term in their seminal article addressing the role of tutoring in problem solving. They first used this term to describe "the nature of the tutorial process; the means whereby an adult or 'expert' helps somebody who is less adult or less expert" (p. 89). The instructional relationship between the developing child and the teaching adult was the focus of the study. Wood et al. (1976) maintain that because

the social context is important to learning, teaching is more complex than simply modeling or imitating. They claim that instruction "involves a kind of 'scaffolding' process that enables a child or novice to solve a problem, carry out a task or achieve a goal which would be beyond his unassisted efforts" (p. 90). They also stress that the result of the process is more than the completion of the task. "It may result eventually, in the development of task competence by the learner at a pace that would far outstrip his unassisted efforts" (Wood et al., 1976, p. 90). They contend that the learner must comprehend the solution before he/she can carry out the process of solving the problem.

Bruner (1986) further describes the act of tutoring as "the implanting of vicarious consciousness in the child by his adult tutor. It is as if there were a kind of scaffolding erected for the learner by the tutor" (p. 74). Bruner (1986) points out that until his study with Wood and Ross (1976) there had been few studies of tutoring; instead there were many studies of what the child could do on his/her own. In comparing Wood et al.'s (1976) definition of scaffolding as "the nature of the tutorial process; the means whereby an adult or 'expert' helps somebody who is less adult or less expert" (p. 89) with Vygotksy's definition of the zone of proximal development as "the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (Vygotksy, 1978, p. 86) one can see the close relationship between the two regarding the importance of the tutor and social interaction in the learning process.

Characteristics of Scaffolding

The concept of scaffolding has been used by many researchers and educators as a metaphor to "describe and explain the role of adults or more knowledgeable peers in guiding children's learning and development" (Verenikina, 2003, p. 1). de Vries (2005) claims that many educators use this term "to describe the way the adult/more capable peer guides the learner through the Zone of Proximal Development" (p. 308). Bodrova and Leong (2007) define scaffolding as:

> The process of providing, and gradually removing external support for learning. During scaffolding, the task itself is not changed, but what the learner initially does is made easier with assistance. As the learner takes more responsibility for performance of the task, less assistance is provided. (pp. 211–212)

According to Searle (1984), Bruner's initial notion of the meaning of scaffolding was expanded by Bruner and Ratner to include features which they viewed as contributing to effective scaffolding such as: familiar semantic domain, predictable structures, role-reversibility, variability, and playfulness. Wood et al. (1976) suggest that what the expert does when providing scaffolding may vary. In their initial work with scaffolding and language acquisition they indicate that when young children are learning language, they are presented with mature speech and parents may vary the amount of contextual support they give as the learning progresses. Examples of scaffolding behaviours in language acquisition may include the following: repetition of important words that have meaning, use of gestures, and responses to utterances of children by paying attention to the utterances themselves without focusing on the grammar. Wood et

al. also note that when an adult maintains a dialogue with a child he/she often treats the child as if the child were another adult who understands everything. Bodrova and Leong (2007) maintain that in such instances, parents act as if the child is able to understand and therefore, they (the parents) are responding to the zone of proximal development and not to the child's actual level of speech development. Vygotsky (1978) indicates that what is in the child's "zone of proximal development today will be the actual developmental level tomorrow" (p. 87). Garvey (1986) refers to this notion as interacting with the "future child" (p. 331).

Stone (1993) maintains that the early study of scaffolding placed emphasis on the "adult's role as a support for the child for accomplishing the goal via task analysis and practice with subcomponents. The result was seen as independent functioning on the part of the child" (p. 170). Stone indicates that,

> the initial discussions of scaffolding were focused on identifying and describing instances of such interactions and on documenting their effectiveness in instilling new capabilities in the child. At the time, little attention was paid to the mechanism by which this transfer of responsibility from the adult to the child was accomplished. In contrast, more recent discussions of the concept of scaffolding have included a greater emphasis on mechanisms of transfer (variously termed transfer of control, internalization, and appropriation). Much of this work has been influenced directly by the work of Vygotsky. (p. 170)

There are many explanations of scaffolding, its relation to the zone of proximal development, and its implementation in the classroom. Wells (1999) regards scaffolding

as a "way of operationalizing Vygotsky's (1987) concept of working in the zone of proximal development" (p. 127) and identifies three features which relate to education: the essential dialogic nature of the discourse in which knowledge is co-constructed, the significance of the kind of activity in which knowing is embedded, and the role of artifacts that mediate knowing. According to Mercer and Fisher (1993) in order for a teaching/learning event to qualify as scaffolding it should: enable learners to carry out the task which they would have been unable to manage on their own, intend to bring learners to a state of competence which will enable them to eventually complete a task on their own, and show evidence of learners having achieved a greater level of independent competence as a result of the experience of scaffolding. They emphasize collaboration between the teacher and the learner in constructing knowledge.

Roehler and Cantlon (1997) describe scaffolding as characterizing "the social interaction among students and teachers that precedes internalization of the knowledge, skills and dispositions deemed valuable and useful for the learners. It is an instructional tool that reduces learning ambiguity, thereby increasing growth opportunities" (p. 9). They describe successful scaffolded instruction as requiring the establishment of

> *intersubjectivity* [emphasis in original] or a shared understanding of the task. Teachers are responsible for leading the learners toward this understanding and helping them develop their own conception of the task. This is accomplished by creating a balance of support and challenge. Support is provided through scaffolding; challenge is provided through learner interest in completing the task. [They further maintain that] scaffolding and challenge need to be presented

> holistically and in a context that signals value and usefulness. This allows the integrity of the task to be maintained throughout the teaching and learning opportunities. Teachers and learners co-construct understandings about the task, enabling shared understanding to be developed. (pp. 9–10)

In describing the context in which scaffolding is most effective Roehler and Cantlon (1997) claim that,

> scaffolding . . . best occurs in learning situations where the learners have opportunities to communicate their thoughts [and that] conversation is a dialogic process by which we create and negotiate knowledge with one another. It is the primary means for solving higher-order problems and developing thinking strategies in those with less expertise. (p. 10)

While exploring the role of scaffolding in two social constructivist classrooms, Roehler and Cantlon (1997) describe five different types of scaffolding designed to help students gain conceptual understandings:

- offering explanations: "explicit statements adjusted to fit the learners' emerging understandings about what is being learned" (p. 17);
- inviting student participation: "learners were given opportunities to join in the process that was occurring. After the teacher provided illustrations of some of the thinking, feelings, of actions that were needed to complete the task, the learners had opportunities to fill in the pieces they knew and understood" (p. 18);
- verifying and clarifying student understandings: "teachers checked the

students' emerging understandings. If the emerging understandings were reasonable, the teacher verified the students' responses. If the emerging understandings were not reasonable, the teacher offered clarification" (p. 18);

- modeling of desired behaviors: "a teaching behavior that showed how one should feel, think, or act within a given situation . . . it included *think-aloud* [emphasis in original] modeling, or demonstrating to learners the thought process underlying successive steps in a task. . . . *talk-alouds* [emphasis in original] in which the teacher showed the learners how to act by talking through the steps of the task as it was completed . . . [and] *performance modeling* [emphasis in original], the learners were simply shown how to carry out a task" (p. 20);
- inviting students to contribute clues: "learners were encouraged to offer clues about how to complete the task" (p. 27).

Roehler and Cantlon (1997) conclude that during scaffolding it is important to have a balance of challenge and support and it is essential to acknowledge the complexity of the instructional situation. They indicate that,

> scaffolding was not a simple process. It was very complex because students were at varying places in learning. The teachers had to provide varying amounts of scaffolding for some students as they struggled to internalize a new concept, strategy, or disposition. Simultaneously, other students were applying that same new knowledge on their own. (p. 38)

They acknowledge scaffolding as an important tool because it

> supports students' learning. It helps students to understand that they can teach and learn from others. . . . learning in this type of socially constructed environment leads students to take responsibility for their own learning and respect their own and others' thinking. (p. 39)

Hogan (1997) also indicates that scaffolding is a challenging form of instruction and describes the meaning of scaffolding as

> providing support to allow a child to think for him or herself. The more advanced partner, or scaffolder, is supportive without being overly directive. A good scaffolder looks for the point where a student can go it alone, and allows the individual to proceed on his or her own initiative. (p. 2)

Wood and Attfield (2005) explain scaffolding in the following way, "Scaffolding describes the ways in which more knowledgeable others provide assistance to learners" (p. 94). They acknowledge that "there is some debate about what is involved in scaffolding, who takes the lead, and whose intentions are paramount" (p. 94). Wood and Attfield (2005) point to Jordan (2004) and Ortega (2003) as providing "contemporary interpretations of the concept [that] include a focus on *joint problem-solving and intersubjectivity*: [italics in original] the novice and expert establish mutual understanding of motivation, abilities, goals, interests and dispositions" (p. 94).

Hogan and Pressley (1997) identify the critical characteristics of scaffolding as: student ownership of the goal, the appropriateness of the task for the student, supportive instruction, shared responsibility for the learning, and internalization of the products of the interchange. They summarize the essential elements of scaffolding as: pre-

engagement, establishing a shared goal, actively diagnosing the understandings and needs of the learner, providing tailored assistance, maintaining pursuit of the goal, giving feedback, controlling for frustration or risk, assisting internalization, independence, and generalization to other contexts. They maintain that, "these are not necessarily procedures to follow in lockstep succession. They can function more as general guidelines or a metascript for dynamic, flexible scaffolding" (p. 84).

Gaskins et al. (1997) regard the scaffold as "a support, such as the temporary framework that supports workers during the construction of a building" (p. 45). They maintain that "scaffolding should take place in a convivial, collaborative environment, where children's contributions are accepted as worthy of consideration and where their understanding is frequently assessed" (p. 46). They indicate that

> scaffolding means explaining, demonstrating, and jointly constructing an idealized version of performance. Scaffolding includes recruiting the student's interest, reducing the number of steps so the task is manageable, maintaining students' persistence toward the goal, making critical features evident, and controlling frustration and risk. (p. 47)

"Scaffolding refers to the supportive situations adults create in which children can extend current knowledge, strategies, and dispositions to a higher level of competence" (Gaskins et al., p. 71).

Berk and Winsler (1995) indicate that research points to the following characteristics of effective scaffolding:

- Joint problem solving: engagement of children in an interesting and culturally

meaningful, collaborative problem-solving activity. Participants can be either adult-child or child-child groupings; what is important is that children interact with someone while the two are jointly trying to reach a goal.

- Intersubjectivity: the process whereby two participants who begin a task with a different understanding arrive at a shared understanding. To achieve true collaboration and to communicate effectively during joint activity, it is essential that the participants work toward the same goal. Intersubjectivity creates a common ground for communication as each partner adjusts to the perspective of the other. . . . an essential element of scaffolding is that the participants in social interaction negotiate, or compromise, by constantly striving for a shared view of the situation—one that falls within the child's Zone of Proximal Development.
- Warmth and responsiveness: concerns the emotional tone of the interaction. Children's engagement with a task and willingness to challenge themselves are maximized when collaboration with the adult is pleasant, warm, and responsive. (p. 29)

Wood and Attfield (2005) indicate that in early childhood settings, play can occupy an important place in which scaffolding can occur. They insist that, "the foundations for learning can be found in terms of the interests of the child, existing levels of competence and confidence to approach an adult for assistance with a self-created problem" (p. 95). The following are identified by Wood and Attfield (2005) as examples of a wide range of scaffolding strategies from which teachers can draw: sensitive

intervention, identification of possible solutions, modeling with correct language, demonstration, questioning to check for understanding, teacher interactions and motivational strategies, mutual contributions. Accordingly, the child may demonstrate some of the following characteristics resulting from incidents of scaffolding: determination, concentration, perseverance, pleasure, and the desire and ability to demonstrate the process to another child.

Hogan and Pressley (1997) insist that "the assumption underlying instructional scaffolding is that there is a cognitive distance between what learners know and can do on their own, and what they are currently capable of doing with the assistance of a more knowledgeable person" (p. 77). They point to scaffolding

> as a complex collaborative process, in contrast to the traditional view of a teacher sequencing small steps for a child's ultimate attainment of new knowledge and skills. Ideally, scaffolding involves equal contributions by the adult and the child, resulting in a fluid communication process in which the emotional quality of the interpersonal relations and the values attached to the learning situation play important roles. The teacher or parent transmits cultural knowledge through scaffolding, but the receiver of the transmission is not passive. The child constructs personal knowledge through a dynamic/learning interplay that draws the child into a more mature, yet still understandable, model of a problem. A key feature of the interaction is that the scaffolder provides just enough support for the learner to make progress on his or her own. (p. 78)

They acknowledge the importance of the teacher's expertise and experience when they say, "Because the optimal level of support is different for each student, teachers must be well acquainted both with their students' needs and with the content they are teaching" (p. 81).

Scaffolding and the Zone of Proximal Development

Jordan (2004) notes that, "Two terms that have become associated with working within the socio-cultural paradigm and within children's ZPD's are 'scaffolding' and 'co-construction'" (p. 32). These terms, along with shared activity and assisted performance, are related to teacher-child and peer interactions within the learning environment. Jordan also asserts that,

> The history of the research and theorizing about learning for children and co-constructing understandings with them has led to some confusion in the literature and teachers who exhibit a wide range of practices all claim adherence to the scaffolding metaphor. (p. 32)

Wood et al. (1976) used the carpenter's metaphor of scaffolding to capture many aspects of adult support of children's efforts:

> In scaffolding, the aim of the adult is to support the child in their efforts towards the level at which they are capable of working. In this process of graduated assistance, the adult or expert peer gradually releases control to the child as she or he becomes more able to accept responsibility for task completion. (p. 32)

Wood and Attfield (2005) acknowledge that,

In a Vygotskian model, teaching is most effective when assistance is offered within the ZPD, and is most responsive to enhancing the learner's performance. The assistance can be provided by a more knowledgeable, more skilled or more experienced 'other' [an adult or peer]. Contemporary interpretations of Vygotsky's ideas stress the importance of the learner's own activity in seeking and using many forms of assistance in the learning environment . . . Thus novices and experts can *co-construct* [emphasis in original] meaning, knowledge and understanding. (p. 104)

Stone (1993) points out that,

Although Wood and his colleagues did not draw explicitly on Vygotsky's work when formulating their ideas concerning scaffolding, there are clear parallels to Vygotsky's concept of the "zone of proximal development." These parallels have not gone unnoticed even by the original authors themselves. As is now well known, Vygotsky (1978) defined the Zone of Proximal Development as the distance between a child's 'actual developmental level as determined by independent problem solving' and his or her 'potential development as determined through problem solving under adult guidance or in collaboration with more capable peers'. In this context, the concept of scaffolding can be seen to represent both a means by which a child's "zone width" (or potential for learning) can be assessed and as a means of observing the process by which the child is helped to capitalize on this potential. Indeed for many the term scaffolding has

> come to be synonymous with the process of adult-child interaction within the ZPD. (p. 170)

According to Bodrova and Leong (2007) shared activity and assisted performance are important aspects of teacher-child and/or peer interactions. They maintain that according to Vygotsky

> development of a behavior occurs on two levels that form the boundaries of the ZPD. The lower level is the child's *independent performance* (emphasis in original)—what the child can do alone. The higher level is the maximum the child can reach with help and is called *assisted performance* (emphasis in original). (p. 40)

Teachers and more knowledgeable peers can engage in assisted performance in a variety of ways (e. g., giving hints and clues, rephrasing questions). Bodrova and Leong confirm that shared activity is acknowledged by Vygotksy as mental functions that can be shared. They go on to explain that, "A mental function exists, or is distributed, between two people before it is appropriated and internalized" (p. 79). They note that there are many ways that an activity can be shared by two or more people and provide the following examples: "A child might use a strategy or concept with the support of another person. Two children might work together to solve a problem. One child might ask questions and another answer" (p. 79).

For Jordan (2004) the concept of co-construction is a powerful extension of Vygotsky's ideas about learning within the zone of proximal development. "The concept

of *co-construction* [emphasis in original] emphasizes the child as a powerful player in his/her own learning" (p. 104). Rogoff (1998) reminds us that,

> the zone of proximal development is not a characterization of what the more expert does to the other. It is a way of describing an activity in which someone with greater expertise assists someone else (or participants in play stretch) to participate in socio-cultural activities in a way that exceeds what they could do otherwise. Socio-cultural approaches to the study of experts assisting novices focus on examining how participants mutually contribute to learning, with attention to institutional, historical aspects of how the activity functions in the community in question." (p. 699)

The role of the adult in supporting children's learning within their zones of proximal development is one that is crucial. Wood and Attfield (2005) maintain that "the relationship between learning and motivation can be a two way process" (p. 95). A child can have the motivation to get to a certain point but then may need to learn new skills in order to be further motivated to complete the task successfully. "Interactions with the teacher [can create] an *enabling scaffold*" [emphasis in original] to assist existing performance and lead towards a higher level of performance. It is debatable whether a child can discover specific principles for him/herself without the assistance of a more knowledgeable other (this could be a child or an adult). The child could easily become frustrated "to the point of de-motivation without skilled assistance" (Wood & Attfield, 2005, p. 95). They indicate that teacher assistance allows "learning to become more efficient" (p. 95) and provides further motivation. A synchronous teaching-learning

dynamic develops between the child and the teacher because they are "acting productively in the *zone of proximal development*" [emphasis in original] (p. 95). Teacher relationships are addressed by Stone (1993) who maintains that one of the "implications of extending a Vygotskian-inspired analysis of scaffolding . . . include[s] the argument that the effectiveness of interactions (and therefore the potential for new learning) within the ZPD varies as a function of the interpersonal relation" (p.170).

> Wood and Attfield (2005) point to Vygotsky's concept of *assisted performance* [emphasis in original] [as being central to the] understanding of socio-cultural theories [and the] unity between teaching and learning. . . . This is defined as what a child can do using internal motivations and capabilities, but with support from more knowledgeable others and from the learning environment. The people and the resources around the learner can provide a *scaffold* [emphasis in original] which supports the transition from the dependent to independent activity. (p. 104)

Jordan (2004) explores the similarities and differences in the working definitions of scaffolding learning for children and co-constructing understandings with them. She indicates that,

> Teachers identified that children were more empowered when interactions were co-constructive in comparison with the outcomes of scaffolding interactions [and that] research in early childhood services demonstrates that staff beliefs are often based on developmental theory, and that their interactions with children tend to be

> of a superficial nature, seldom tapping into children's thinking, let alone challenging and extending thinking through scaffolding learning. (p. 31)

According to Malaguzzi (1993),

> the term "co-construction" emphasizes the child as a powerful player in his/her own learning. The child as a co-constructor provokes an image of the child as "rich in potential, powerful, competent, and most of all, connected to adults and to other children". (p. 10)

Jordan (2004) maintains that,

> Co-construction thus places emphasis on teachers and children together studying meanings in favour of acquiring facts. Studying meaning requires teachers and children to make sense of the world, interpreting and understanding activities and observations as they interact with each other. (p. 33)

She continues by emphasizing that,

> in order to co-construct meaning and understanding, the teacher needs to become aware of what the child thinks and knows and understands, and to engage with this body of knowledge. The child's own expertise is acknowledged as being as valid as the teacher's and is frequently more accurate and detailed when the topic under discussion is outside of the adult's field of expertise but within the child's .... co-construction requires excellent skills of dialogue between teachers and children as well as a willingness to find out more content knowledge about the topic of children's investigations. (pp. 33–34)

From the research of Jordan (2004), the following similarities and differences between scaffolding and co-constructing are noted. Teachers demonstrated the following interactions whether they were scaffolding learning *for* [emphasis in original], or co-constructing learning *with* [emphasis in original] children:

- maintaining warm (trusting reciprocal) relationships;
- questioning techniques (which are somewhat different under the scaffolding or the co-constructive model);
- using artifacts, such as photos of previous activities;
- encouraging children to work with each other;
- verbalizing children's activities in support of their learning (reciprocal responding).

When scaffolding learning for children, teachers demonstrated the following interactions:

- questioning techniques, with particular knowledge outcome in the teacher's head;
- providing feedback on cognitive skills noticing children's small achievements and voicing this;
- demonstrating and modeling skills;
- identifying children's schema;
- supporting children's problem-solving and experimentation, with a predetermined outcome or task in the teacher's mind;
- telling children specific knowledge facts, in the context of their interests,

developing limited intersubjectivity with children.

When co-constructing learning with children, teachers demonstrated the following interactions:

- co-constructing meaning, including hearing children and getting to know what they think;
- questioning techniques with no particular knowledge outcome in the teacher's head, aware of their interests, not interrupting them, allowing silences, following children/s leads;
- making links in thinking across time and activities through revisiting children's ideas and interests, making links between many sources of ideas, knowing children really well;
- developing full, two-way intersubjectivity with children, through sharing their own ideas with children to extend their current interests, often as in-depth projects, entering children's fantasy play, valuing and giving voice to children's activities, respectfully checking that a child would like the offered assistance. (Jordan, pp. 40–41)

Jordan argues, "in contrast to scaffolding, the language of co-construction of learning generally has no prescribed content outcomes . . . the focus is on developing shared meanings/intersubjectivity, and each participant contributing to the ongoing learning experiences from their own expertise and points of view."

In practice, teachers who have access to a full range of skills move flexibly between those of scaffolding and those of co-constructing learning. The major

> issue here is one of the use of power. If children are to be empowered as equal contributors to learning situations, they need to be in an environment in which they learn that they have the power to make decisions about the direction of their learning. (2004, p. 42)

Self-Scaffolding

The notion of self-scaffolding has been addressed by several researchers and scholars. Meadows (1993) regards self-scaffolding as a teaching technique that has been

> so well internalized by the learners that they can provide it for themselves in new learning situations; the learning child internalizes the teacher's actions and reflections, transforming them into his or her own way of solving that particular problem or doing that particular task, but also internalizing and developing more general tools—how to observe, how to imitate, how to analyze, how to scaffold one's own cognitive activity or another person's. These powerful metacognitive activities contribute to making the learner into a "self-running problem-solver." (p. 344)

Wood and Attfield (2005) discuss the concept of self-scaffolding and maintain that,

> As children's experience and expertise develop, they become more capable of assisting their own performance. They develop *metacognitive skills and strategies* [emphasis in original] that enable them to make choices and decisions, exercise conscious control and awareness of their activities, and seek out help from other

> people, tools and resources in the environment. . . . Learners remain interdependent but may become more selective and intentional in terms of seeking assistance based on their own motivation, goals and interests, and providing their own *self-scaffolding*. [emphasis in original] (pp. 106–107)

Scaffolding and Controversy

Not all researchers and scholars fully agree with the scaffolding metaphor. Jordan (2004) challenges the acceptance of Wood et al.'s (1976) conception of scaffolding as a metaphor for learning and views this metaphor as "contentious" (p. 32). Stone (1993) criticizes scaffolding as being too mechanical a model and that a scaffold "is an inert support for a structure (the child) maintained by external forces (the adult) until further external forces (planning procedures, activities) are able to sufficiently build the structure that is able to stand alone." He insists that,

> A persisting limitation of the metaphor of scaffolding relates to the specification of the communicative mechanisms involved in the adult-child interaction constituting the scaffolding process. The mechanisms are crucial to Vygotsky's theoretical framework: however, his own discussion of them was sketchy. Luckily, some efforts have been made by current writers to explore the potential of Vygotsky's original line of thinking. (p. 170)

Scaffolding in Early Childhood Music Education Research

Although there is considerable evidence of research regarding scaffolding in many curricular areas within early childhood education (Bodrova & Leong, 2007), research which investigates the teaching/learning possibilities of scaffolding in early childhood musical play environments has not been significantly addressed (Jordan-Decarbo & Nelson, 2002; de Vries, 2005). The exploration of scaffolding in structured early childhood music settings is also limited.

St. John (2006) examined the experiences of flow and scaffolding in a structured Kindermusik classroom setting and found that, "children's collaborative efforts, specifically the fluidity of rapid exchanges and their reciprocity with scaffolding, facilitated flow and helped sustain it" (p. 255). de Vries (2005) pointed to "applications of Vygotsky's theory in music education as scarce" (p. 307) in his study of scaffolding as it applied to vocal improvisation and song acquisition with a 2-year-old child. He indicates the effectiveness of scaffolding strategies such as repeating back what the child did, describing what the child did, and modeling and suggests that it is "important to consider one-on-one musical interactions between child and adult that allow for the development of young children's vocal improvisation" (p. 309). He contrasts this approach with the large-group teacher-directed music-making which is more commonly found in early childhood music programs and maintains that "adults need to be open to pursuing young children's musical development whenever children wish to pursue their natural love of music-making, whether this occurs in scheduled periods devoted to music or not" (p. 310).

Sawyer (2004), discusses the role of the teacher (although not in a music specific setting) and posits that the teacher's role is one of improviser rather than one of scripted instructor and stresses that the improvisational nature of teaching aligns with "constructivist, inquiry-based, and dialogic teaching methods that emphasize classroom collaboration" (p. 12). St. John (2003) describes an effective early childhood music teacher as one who is "willing to construct the lesson from the child's frame of reference, not from a song imposed on the child but from the song the child is singing. This kind of approach is not about a type of method; it is about quality of being" (p. 52). Luce (2001) addresses collaborative learning within the music classroom and acknowledges collaborative learning as translating to "how others make sense of themselves and their role into a new, socially constructed knowledge-based community" (p. 21). He points to the concept of the knowledgeable peer and recognizes that "students bring a storehouse of knowledge and experience to any school environment" (p. 21). He laments the noticeable absence of collaborative learning "within the field of music education" (p. 20).

In the few cited studies, adults play active roles in the co-construction of meaning along with children in music settings. However, although de Vries (2005) claims that the participation of adults is most effective during periods of musical play, the body of research that addresses this idea is minimal. He also indicates that the absence of studies which explore the place of scaffolding in early childhood music settings is of concern to the music education community.

Conclusion

The understanding of scaffolding and its educational implications has advanced since the term was originally coined by Wood et al. (1976). Stone (1994) notes the expansion of the metaphor from one that

> focused primarily on describing a process of assisting the child in identifying, sequencing, and practicing . . . [to a view of scaffolding as a] much more subtle phenomenon, one that involves a complex set of social and semiotic dynamics. (p. 180)

Verenikina (2006) cautions educators to beware of the possibility of viewing the child as a passive recipient of direct instruction as a result of a literal interpretation of the scaffolding metaphor and maintains that "this falls far behind the Vygotskian idea of the ZPD and the Piagetian view of the child as an active self-explorer" (pp. 3–4). She emphasizes the need for a "deeper understanding of the theoretical underpinning of the scaffolding metaphor [to] promote its creative and informed use by educators" (p. 4).

Summary of Related Literature

The related literature that has been discussed in this chapter has assisted in the refining of the research questions for this study. The historical perspective and the literature related to play have provided a solid foundation from which I approached play in music. Likewise, the history of research related to musical play in early childhood music education, as well as more current studies of musical play, have presented a perspective from which this study can be grounded. The literature which is relevant to the

understanding of Vygotksy's zone of proximal development is key to this study, for only by studying this seminal writing can one truly appreciate the meaning of scaffolding as was first presented and discussed by Wood et al. (1976) and then further elaborated upon by many other researchers, educators, and scholars. Finally, the literature that is directly related to Vygotsky's theory associated with the zone of proximal development and Wood et al.'s notion of scaffolding and the relationship of these ideas to the development of musical understanding through scaffolding during musical play in early childhood education settings served as a starting point for this study.

CHAPTER THREE:

METHODOLOGY

Research Design

Case study research design that employed the tools and techniques of ethnography was used to investigate my two research questions: 1) *How do pre-school children scaffold their own and their peers' musical growth and understanding during musical play,* and 2) *How do early childhood educators scaffold young children's musical growth and understanding during musical play?* According to Merriam (1998), case study is regarded as "prevalent throughout the field of education" (p. 26) and one of the forms of inquiry that falls under the umbrella of qualitative research. She goes on to define qualitative case study as an "intensive, holistic description and analysis of a single instance, phenomenon, or social unit" (p. 21).

According to Stake (2003), "Case study is not a methodological choice but a choice of what to study [and] what specially can be learned from the single case" (pp. 134–135). Ellis (1997) and Merriam (1998) point to case studies as providing in-depth understanding and meaning of a situation for those involved in the research. As noted by Stake (1995), the purpose of case study is "not to represent the world, but to represent the case" (p. 246). Merriam (1998) maintains that case studies "can directly influence policy, practice, and future research" (p. 19). Case study research, according to Stake (2003), can also be undertaken because of an intrinsic interest (e. g., a child, clinic, conference, or curriculum)" (p. 137). Investigating the scaffolding strategies that are used by young

children, their peers, and their teachers in the construction of musical understanding and meaning within a musical play environment is central to this case study.

Creswell (2002) describes case study as "an in-depth exploration of a bounded system (e. g., an activity, event, process, or individuals) based on extensive data collection. 'Bounded' indicates that the case is separated out for research in terms of time, place or some physical boundaries" (p. 485). Merriam (1998) claims "that the single most defining characteristic of case study research lies in delimiting the object of study, the case, as a thing, a single entity, a unit around which there are boundaries" (p. 27). She describes the notion of fencing in what the researcher is going to study. Miles and Huberman (1994) regard the case as a "phenomenon of some sort occurring in a bounded context" (p. 25).

As a result, case study research design was chosen to investigate this study's research questions for several reasons:

1. The inquiry was based on questions of *how* which Yin (2003) acknowledges as one of the preferred investigative inquiries within case study design. My research questions focus on the *how* of scaffolding during children's musical play.

2. Merriam (1998) considers case studies as "intensive descriptions and analyses of a *single unit* or *bounded system* such as an individual, program, event, group, intervention, or community" (p. 19, emphasis in original). Merriam (1998) also points to several ways of assessing the boundedness of a study including a limited number of participants and a finite amount of observation time. The boundedness of this case study is very clear for it involves one class of 19 4-year-old children in one nursery school

setting. The time allotted to the study was approximately 3 months and this was specified at the beginning of the study.

3. Case study research as seen by Wolcott (1992) is "an end-product of field-oriented research" (p. 36). It was anticipated that this study's design would facilitate the development of vignettes that would endeavour to answer the *how* research questions.

4. Merriam (1998) indicates that, "The bounded system, or case, might be selected because it is an instance of some concern, issue, or hypothesis" (p. 28). In this study the case was selected because of questions related to teaching practices concerning scaffolding during musical play in an early childhood classroom.

5. Cronbach (1975) points to case study as being different from other research designs because of "interpretation in context" (p. 123). "By concentrating on a single entity (the case), the researcher aims to uncover the interaction of significant factors characteristic of the phenomenon" (Merriam, 1998, p. 28). The context was significant in this study for it provided the environment in which the children could interact with their teachers and their peers during musical play and it also provided the setting in which I, as the researcher, could ask questions and search for meaning.

Schwandt (2001) indicates that "context is *produced* in the social practice of asking questions about meaning, identity, speech, and so on" (p. 37, emphasis in original). Yin points out that "case study is a design particularly suited to situations in which it is impossible to separate the phenomenon's variables from their context" (as cited in Merriam, 1998, p. 29). Case study research design was particularly suited to addressing research questions within the complex early childhood classroom setting.

Data Collection Tools

Ethnography was rooted in anthropological practices and is historically more prescriptive in its practices than it is today (Van Maanen, 1988). Spindler (1988) describes the growing popularity of educational ethnography during the 1980s as meteoric. Gall, Gall, and Borg (2005) indicate that ethnographic research practices correspond closely to case study research procedures with both involving "formulating a research problem and selecting a case, collecting field data, analyzing and interpreting the data, and reporting study findings" (p. 351). The relationship between case study and ethnography is discussed by Ellen (1984) who regards case studies as "the detailed presentation of ethnographic data . . . . For the purposes of exposition, a set of events must be lifted from the ongoing stream and presented, . . . isolated from antecedent and subsequent events" (p. 237). Ager (1996) and LeCompte and Schensul (1999) agree that case study and ethnography are regarded as both a product of research and a research process.

This case study employed the tools of ethnography to collect and interpret the data. Le Compte and Schensul (1999) acknowledge the principle data base of ethnography as being "amassed in the course of human interaction, direct observation; face-to-face interviewing and elicitations; audiovisual recording; and mapping the networks, times, and places in which human interactions occur" (p. xiv). They regard the basic tools of ethnography as being the eyes and ears of the researcher and maintain that these tools are "designed for discovery" (p. 2). Ethnographic researchers then,

systematically observe, learn the meanings of what people make and do, and enter the research site as "'invited guests' to learn what is going on" (p. 2).

Ager (1996) regards participant observation as one of the key tools of ethnography. The role of participant observer fulfills the role of ethnographer in going out and encountering the phenomenon first hand (Ager). He expands this notion when he says:

> participant observation . . . codes the assumption that the raw materials of ethnographic research lie out there in the daily activities of the people you are interested in, and the only way to access those activities is to establish relationships with people, participate with them in what they do, and observe what is going on. (p. 31)

Merriam (1998) notes "case study does not claim any particular method for data collection or data analysis" (p. 28). The tools of ethnography seemed particularly suited to collecting the data in this study for as she further explains, "A case study focusing on . . . the culture of a school, a group of students, or classroom behavior would be an ethnographic case study" (p. 34). This study involved a group of children as well as behaviours in the classroom and therefore called for many of the tools of ethnography described by LeCompte and Schensul (1999) such as: direct observation, audiovisual recording, and "mapping the networks, times, and places in which human interactions occur" (p. xiv). My role as participant observer in this study also fulfilled one of the key roles of ethnography as indicated by Ager (1996).

Study Sample and Research Site

Purposeful sampling as described by Patton (2001) was used to select the case for this study. Gall, Gall, and Borg (2005) indicate that the goal of purposeful sampling "is to select individuals for case study who are likely to be 'information-rich' with respect to the researchers' purposes" (p. 310). Creswell (2002) confirms this process when he states, "the qualitative researcher purposefully or intentionally selects individuals and sites" (p. 193).

The case chosen for this qualitative research study was a 19-member class of 4-year-old children who attend the Wild Rose Nursery School (pseudonym), a privately owned and operated pre-school in a large western Canadian urban centre. Within the context of this study, nursery school is defined as a pre-school program for children ages 3 and 4. The children who participated in the study were from the 4-year-old class and attended nursery school every Monday, Wednesday, and Friday morning from 9:00 to 11:15. There were 11 girls and 8 boys in the class. Because of the school's class time, organization, and schedule, the children generally came from homes where mothers, fathers, nannies, and/or grandparents cared for the children during the times when the children were not at school. These children did not attend daycare and on the non-school days they were cared for at home and participated in a variety of other non-structured (e. g., play) and structured (e. g., swimming lessons) activities. The children were from a variety of backgrounds and there were no restrictions on enrollment other than the age of the child and the parent's ability to pay the tuition and transport the child to and from the nursery school.

The nursery school is housed in a large unused classroom in an urban elementary/junior high school. The school is underused for its size and therefore the owner of the nursery school is able to rent this space from the School District. The classroom is very large with a high ceiling and windows located near the roof. The teaching space has a great deal of natural light which contributes to its pleasant, open environment. At one end of the classroom is a stage area with stairs leading to it from within the classroom. This area is used for the children's snack time, special projects and occasions, as well as some storage. The children were aware of the access boundaries for this area of the classroom and that it was only used at snack time or for special projects. I did not ever see children trying to enter this area unsupervised.

Three large tables at which the children sat to work on projects and reading and writing activities were located within the classroom. A piano and small stereo were situated in one corner and in that corner was a small shelf that contained a variety of unpitched percussion instruments. Another table was set up near the sink so that children could paint and then be responsible to fill water containers and clean up after themselves. Bulletin boards filled with pictures that were related to the ongoing themes were located around the classroom's perimeter. These displays were changed on several occasions to correspond with the school's themes during the data collection phases.

The classroom incorporated a variety of play centres including a kitchen, a puppet theatre, a dress-up area, and a variety of changing theme centres (e. g., dinosaurs, math, painting, etc.). During the children's play time they were encouraged to make their own choices and to spend time at a variety of the prepared centres.

This nursery school is advertised as including music, art, and dance experiences as part of its curriculum. It is well known and respected in the community because of its positive 20-year history and as a pre-school program that offers a combination of play, semi-structured, and structured activities. The children were accustomed to choices of free play activities and occasionally, even before the research took place, had some opportunities for musical play.

The nursery school's teacher-developed curriculum was comprised of a variety of theme-based activities including paper and pencil reading activities, art, arts and crafts, movement and dance, and structured music lessons that focused on singing and moving. The children also had many opportunities to independently explore books, puppets, costumes, toys, and a wide variety of other materials as well as paint, draw, and create during extended periods of play. The classroom displays and play materials were changed on a regular basis to reflect the changing focus or theme.

The teacher, Mrs. Pauls, (pseudonym) had over 20 years of experience working with pre-school children in this environment. She was initially employed at the school as the movement, music, and dance teacher. When the original owner of Wild Rose Nursery School retired, Mrs. Pauls purchased the school and assumed the leadership of the school. She became the primary teacher and hired university students to work as teaching assistants.

When parents registered their children at Wild Rose Nursery School, Mrs. Pauls clearly articulated her expectations for children's behaviour and the children demonstrated their understanding of these expectations through their actions. She was

gentle, firm, kind, realistic, and respectful and the children responded in kind. Any disagreements or issues related to the behaviour of the children were always handled in a quiet, positive, gentle way with reminders to the children of expectations.

Two university students worked as teaching assistants at the nursery school. They took their lead from Mrs. Pauls and followed the directions that she provided. One of the teaching assistants was enrolled in the Faculty of Arts with a major in psychology and the other was an Education student with a major in secondary education. One worked on Mondays and Wednesdays and the other was in attendance on Fridays. The children appeared very comfortable with this schedule. The teaching assistants interacted with and helped the children as they worked on writing activities (e. g., practicing printing letters of the alphabet) and arts and crafts projects. They also assisted with snack time and provided support and assistance in a wide variety of ways. They were not involved in specific curricular decision-making.

Role of the Researcher

My role as a researcher was one of participant observer. The role of adult participant observer within the children's culture presents many challenges. As Corsaro (1996) indicates, "entering children's worlds, overcoming their suspicion of and resistance to adult control, and gaining their acceptance and trust are difficult tasks" (p. 449). Fine and Sandstrom (1988) address this issue and remind us that, "In traditional ethnographic settings, a common assumption is that one's research subjects are equal in status to oneself, or at least should be treated as such" (p. 13). However, "in participating

with children such a policy is not fully tenable, because the social roles of the participants have been influenced by age, cognitive development, physical maturity, and acquisition of social responsibility" (Fine & Sandstrom, p. 14). They acknowledge four researcher roles: supervisor, leader, observer, and friend. Moving from the role of observer to the role of friend suggests the treating of participants with respect and the desire for competency in the child's and/or adults' social worlds (Fine & Sandstrom). They maintain that, "in order to be a participant observer with children, one must be able to deal with them on a relatively equal footing and one must have the ability and desire to listen to them" (p. 22).

Ellen (1984) describes the participant observer from a different point of view. "[T]he researcher does not participate in the lives of subjects in order to observe them, but rather observes while participating fully in their lives. Such a procedure defines the role as not of participant observer but of observing participant" (p. 29). This view coincides with the view of the changing role of the researcher from observer to friend as described by Fine and Sandstrom (1988). The time that I spent in the field presented the opportunity for my role to change from participant observer to observing participant.

In my role as participant observer and observing participant I interacted with the children as if I were one of the teachers in the school. During this time I was able to engage with the children and, through this active involvement, collect the data that would inform my study and potentially provide answers to the two research questions.

Data Collection Process

The data were collected in a variety of ways including transcribed observations, video tape recordings, still photographs, and journal entries. Bishop (1999) emphasizes that within ethnography, data are collected by more than one method (interviews, direct observation, artefacts) "in order to ensure triangulation" (p. 13). Field notes are regarded as vital to the process and Ellen (1984) insists that, "The compilation of notes and other written records is arguably the most important part of the fieldwork enterprise, and something which must begin at the very outset of research" (p. 278).

Further, Best and Kahn (2003) note the importance of simultaneous recording of observations and its value for "minimizing the errors resulting from faulty memory" (p. 297). As a result, field notes were written from my own personal observations; the research assistants' transcribed observations; digital video recordings; teacher's observations, comments, and notes; and still photographs. The simultaneous collection of data, documented by two or three observers through a variety of recorded observations contributed to the minimization of errors as described by Best and Kahn. It was anticipated that children might also contribute artefacts such as drawings and examples of invented musical notation. Accordingly, evidence of these artifacts was captured in the photographs and on video tapes. Research assistants provided support in carrying out duties associated with data collection by responding to my direction regarding data collection procedures. My decisions were dependent upon the daily classroom environment and in response to the children's daily activities. Indeed, the research team strove for both variety and consistency in the daily data collection.

Research Assistants

I required a minimum of two research assistants to aid with the data collection associated with ethnography (i. e., videotaping, transcribing classroom activities through written documentation, and still photography). Research assistants played a vital part in the data collection process. To recruit research assistants for this study, I looked to undergraduate elementary education students who were enrolled in at least one university music curriculum and instruction course. I hoped that involvement in research of this kind could provide them with experiences as volunteers within an educational research setting. In order to make students aware of the volunteer opportunity I made a short presentation in two undergraduate music education classes. One class was designed for education students who were enrolled in a compulsory music curriculum and instruction course and the other class was a required course for students whose major area of focus was music within the elementary education route. Following the presentation I provided all of the students with a written overview of the research, an indication of the time commitment, and my contact information. Students were invited to contact me via e-mail if they wished to learn more about the project or volunteer as research assistants.

Three undergraduate music education students contacted me individually and expressed their interest in being involved. Two were available to come on Fridays and the other was available to come on Mondays and Wednesdays. They were committed to assist during both phases of the research. I met with each of the research assistants individually to assist them in becoming more familiar with the research, to answer any

questions, and to train them in their data collection duties. Each was provided with a copy of the research proposal to help them to become familiar with the research questions, the research methodology, and the related literature. Best and Kahn (2003) remind qualitative researchers of the importance of observation being "carefully planned, systematic, and perceptive" and of the significance of the observers "know[ing] what they are looking for" (p. 300). The time that was spent with the research assistants in advance of the data collection was vital to the reliability of the data. All three research assistants signed the *Confidentiality Agreement* (Appendix C) forms and subsequently fulfilled their research assistant roles during the duration of the data collection.

The research assistants' data collection tasks varied depending upon the activities and organization of the nursery school day and the choices of the children. I ensured that there was variety in data collection practices on each day. The field notes of the research assistants, still photographs, digital videos, and my field notes made up all of the data which was later compiled, categorized, and analyzed. Triangulation in qualitative research is noted for the important role it has in validating the accuracy of the findings. Triangulation has been defined and explained in the following ways by various leaders in educational research: "the process of corroborating evidence from different individuals, types of data, or methods of data collection" (Creswell, 2002, p. 280) and "the process of using multiple data-collection methods, data sources, analysts, or theories to check case study findings" (Gall, Gall, & Borg, 2005, p. 320). Eisner (1998) labels this aspect of qualitative research as "structural corroboration" and describes it as "a means through which multiple types of data are related to each other to support or contradict the

interpretation and evaluation of a state of affairs" (p. 110). Through the collection of data in multiple ways, an important feature of qualitative research was accomplished and as Eisner points out, "anything that allows us to deepen our understanding by using multiple data sources is advantageous" (p. 82).

Research Process

Preliminary Work

As I began to consider the research that I wished to undertake I contemplated who I might approach to be involved as possible research participants. I knew of Mrs. Pauls and the Wild Rose Nursery School because of the reputation that both she and the school had in the community. I had met her in the past and knew that she was very interested in music and movement for young children and that she included both in her nursery school program. Eight months before the research began, I telephoned Mrs. Pauls and asked if she would meet with me to discuss my potential research and to see if she might be interested in the possibility of being involved. At this point in time the research proposal was in the initial stage of development and the research questions had not been fully formulated.

Access and Approval

I met with Mrs. Pauls at the nursery school in the spring prior to the following winter/spring research schedule. I explained that I was contemplating conducting research with pre-school children on the topic of musical play and wondered if she might

be interested in being involved. Mrs. Pauls was very excited at the possibility and enthusiastically stated that she was very interested in being a part of the research. As McMillan (2000) indicates, gaining permission and establishing rapport are two important steps in entering the research site. This is followed by, as McMillan and Schumacher (1989) indicate, making contact with the person who has the authority to grant research permission. All three aspects had been accomplished at this time.

During the months prior to the start of the research I spoke with Mrs. Pauls on several occasions, both over the telephone and in person. I kept her informed regarding the progress of the research proposal and the now formulated research questions. Our discussions provided assistance with mapping the field and as McMillan and Schumacher (1989) explain, this process provides a process for "acquiring data of the social, special and temporal relationships in the site to gain a sense of the total context" (p. 395). I provided Mrs. Pauls with a copy of the research proposal and invited her questions, feedback, and suggestions.

Communicating with the Teacher and Teaching Assistants

During the fall term that preceded the data collection I had several opportunities to discuss the research proposal with Mrs. Pauls during phone and in-person conversations. The teaching assistants were often on hand during the informal in-person discussions and this provided opportunities for them to also ask questions and confirm their understanding of the project. Once the ethics had been approved in January, Mrs. Pauls assisted me by distributing the *Parent Information Letters* (Appendix A) and

collecting the *Informed Consent* (Appendix E) forms. Because of this assistance, I was able to begin the research very quickly following the approval of the Ethics Application.

Informing and Meeting Parents

Parents were informed of the research project through a Parent Information Letter that was distributed by Mrs. Pauls. It was included as part of the regular package of materials (e. g., children's work, notes, newsletters) that was sent home every Friday. In order that parents had an opportunity to ask questions, discuss, clarify, or express any concerns about the research, I was in attendance at the nursery school as parents brought the children to school on the Monday that followed the distribution of forms. Mrs. Pauls was also very helpful in answering parent questions if I was unavailable. All parents returned the Informed Consent forms and all agreed to have their children participate. In many cases the children also signed the form. The parents also expressed interest in hearing about the results of the data analysis at a future meeting and provided e-mail contact addresses to the researcher.

Ethical Considerations

Involving children in research requires thoughtful consideration. In their discussion regarding views of children and childhood related to conducting research with children, Greene and Hogan (2005) insist, "Studying children as persons implies a view of children as sentient beings who can act with intention and as agents in their own lives"

(p. 3). They also indicate that, "It is easy to underestimate children's abilities and to patronize them" (p. 8).

Emond (2005) points to many important issues of which the researcher must be aware. The development of relationships is a vital first step in the formulating of trust. As the researcher enters the world of the participants (i. e., the classroom), careful negotiation of his/her place and development of relationships with the children precede the children's acceptance of the researcher. The children ultimately control the extent to which the researcher will be allowed into their world.

When considering the use of observation as a research technique, Emond (2005) indicates that there is an observational continuum that ranges from wholly observational to complete participation and emphasizes the difficulty of approaching research from either extreme. She maintains that the presence of a complete observer "can be deeply unsettling to children" (p. 124). On the other hand, when considering the role of participant "it is debatable whether an adult researcher can fully take on the 'part of a child'" (p. 124). In the opinion of Emond "we must, as researchers, look to our own skills, abilities and resources and seek to use these to establish a worthwhile research relationship" (p. 125). She stresses the importance of developing "a style which is comfortable to children and reflects your 'true self'" (p. 131). Graue and Walsh (1998) point to the importance of studying children face-to-face and for extended periods of time. They regard ethical behaviour as being about attitude and say, "Entering other people's lives is intrusive. It requires permission that goes beyond the kind that comes

from consent forms. It is the permission that permeates any respectful relationship between people" (p. 56).

According to Hill (2005) ethical issues related to research methods with children have "rarely been reported outside medical research that involves invasive or painful procedures" (p. 61). However, he indicates that this is changing because "public prominence given to children's rights and the fast developing social studies of childhood have challenged adult thinking about children; in the process, placing children's perspectives in the foreground" (p. 61). He maintains that these ways of thinking have led to a reappraisal of appropriate ways of conducting research with children. Davis (as cited in Hill, 2005) argues for researchers to be reflexive, question their assumptions about children, and adapt to each individual rather than assume that there are universal answers to the ethical and methodological issues of researching with children.

Both the UN Convention on the Rights of the Child and current thinking about participatory research insist that researchers maximize opportunities for children to provide input at each stage of the research process. Informed consent is an issue that must be acknowledged. Children should be told such things as: aims of the research, time and commitment, how they will be told of the results, possibilities of feedback, and promise of confidentiality. In his discussion of informed consent that concerns children, Hill (2005) reminds us that, "Even pre-schoolers may be given very simple explanations" (p. 69). Children require the same level of freedom to refuse participation, to be treated with respect, and to be offered confidentiality. If informed consent is to be attained, then participants must have a full understanding of the research process. Although this may

pose some challenges with young children, Emond (2005) indicates that it is not impossible but that it will take time and flexibility on the part of the researcher. The aims of the research need to be articulated in a way that is accessible, understandable, and meaningful for children. To ensure that all children are comfortable, it may be necessary to approach children in a variety of ways (e. g., individually; in small groups; with a friend, parent, or another adult). Children should be allowed opportunities to ask questions regarding the research at any point, on any occasion, and in any way.

I was constantly reminded of my ethical obligations as I prepared the Ethics application and was cognizant of my responsibilities to the children and the adults who would be participating in the study. In order to protect human subjects during the research process, all of the guidelines set by the University Alberta Standards for the Protection of Human Research Participants and the ethical expectations outlined for the Faculties of Education, Extension, and Augustana Research Ethics Board were followed.

I paid attention to all details regarding confidentiality and anonymity and it was clearly stated that the children's identities, the identity of the teacher, teaching assistants, and the school would, through the use of pseudonyms, be kept anonymous. The right to refuse to participate or withdraw from the study at any time was also clearly stated.

Building Trust and Rapport

Building trust and developing rapport were paramount to this study. The children attended nursery school for 3 mornings a week and it was my intent to be present and involved on all 3 days, both when they were engaged in musical play and when they were

participating in other activities. I was especially aware of the importance of building trust with the children, the teachers, and the other adults with whom they were involved. I recognized that the task of trust building would be ongoing but would be especially important during my initial days at the nursery school. To accomplish the building of trust I assumed the role of one of the teachers at the nursery school—a role that could be described as participating observer. In my role as teacher/participating observer I actively engaged with the children and other teachers in a way that complimented the philosophy of the school. It was my intent to participate in a relaxed, collaborative manner, just as I would if I were their teacher. In this way, I could, as Ager (1996) suggests, make "it possible for surprises to happen, for the unexpected to occur" (p. 31).

The subject of building trust has been addressed by many scholars. Guba and Lincoln (1985) regard the building of trust as a developmental task, which is not "something that suddenly appears after certain matters have been accomplished . . . but something that has to be worked on day to day" (p. 257). Ager (1996) insists on the importance of presenting your work and the tasks honestly and in a way that will make sense to those who will be involved. He notes that, "relationships will change over the time that you do the research" (Ager, 1996, p. 120). Fine and Sandstrom (1988) regard empathy and the ability to develop a close relationship with the participants as basic requirements of a participant observer. They also indicate that building trust must also be extended to other adults (e. g., parents and teachers) who have responsibility for the children.

Corsaro (1996) provides researchers with a variety of practical suggestions that may assist them in the development of trusting relationships. He suggests activities such as physically moving to the level of the children (e. g., down on the floor) and using a reactive style which involves neither the initiation or termination of activities, (i. e., maintaining a peripheral vantage point). He also recommends allowing curious children to see and write in notebooks that are used for data collection and being mindful of the use of pseudonyms.

I was in attendance at the nursery school on two occasions during the fall term (prior to the research) and therefore the children were somewhat familiar with me. On the first day of the data collection I spent time talking informally to the children, telling them who I was and what I was going to be doing at the school from then (the beginning of February) until the spring. They had opportunities to ask questions but for the most part they wanted to proceed with their regular school routine. Very quickly and without hesitation they accepted me as one of their teachers. When the research assistants arrived they were introduced to the children by Mrs. Pauls. They, too, were quickly taken into the trust of the children. The children were friendly and positive in their interactions with the research team as they welcomed us as nursery school participants. During the initial days of the research several children invited us to join them in their play. I felt that my extensive experience as a teacher of young children, a consultant to teachers, a parent to my own children, and an experienced early childhood education researcher positively contributed to my ability to build trust and interact positively in this educational research setting.

Field Work

Overview

The field work for this study took place three mornings a week for a period of 9 weeks. I spent the first day observing at the nursery school on my own without the help of the research assistants. I wanted to personally observe the children and from those observations be able to provide additional informed direction to the research assistants. This also gave me an opportunity to continue to develop rapport with the children and generate some preliminary journal notes.

During the initial days of the research, the research assistants and I were in attendance when the children arrived at school in anticipation of involving them in free musical play as the first activity of the day. Following the musical play, Mrs. Pauls would continue with the regularly planned program and curriculum. At first this worked quite well but as time progressed, Mrs. Pauls, in conjunction with advice from the teaching assistants, requested that the musical play research take place once the children had worked on their structured writing and arts and crafts projects each day. The teachers found that it was sometimes difficult to accomplish these activities once the children were involved and engrossed in musical play. The work that children brought home with them was a parental expectation and the teachers were feeling some pressure that they did not have time to complete these activities. I respected their concerns and together we rethought this scheduling aspect of the research project.

I frequently started each musical playtime with a 5- to 8-minute semi-structured music time. This provided an opportunity for us to meet together and I invited the children to participate in activities such as: listening to a story that might initiate musical play responses, singing a song that was related to the school theme, or discussing musical instruments and how they might be played. On occasion, Mrs. Pauls requested that I introduce a specific theme-related book or song to the children.

The children enthusiastically contributed to discussions and actively participated in the group music time. Following this short group experience they were given the freedom to make their play choices from all of the available play centres including the musical play centre. The organization and materials of the music play centre varied from day to day with some of the choices remaining constant and some equipment and materials being changed. In this way children had opportunities to explore materials in a variety of ways with consistency and change being embedded in the centre. The following is a list of equipment and materials that were made available to the children:

- Unpitched percussion instruments: drums, finger cymbals, claves, sand blocks, wood blocks, jingle bells, etc.
- Pitched percussion instruments: Orff instruments including bass, alto, and soprano xylophones, metallophones, and glockenspiels; individual melody bells
- Puppets
- Music-related books
- Variety of coloured scarves

- CDs and CD player
- Felt staves and notes
- Rhythm flash cards
- Variety of harps (e. g., Celtic harp, autoharp)
- Piano

Research Phases

This case study was comprised of two phases. The first phase of the study included all of the children in the 4-year-old program at Wild Rose Nursery School. The second phase included three children from the 4-year-old class who were identified at the end of phase one of the study as those who demonstrated that during musical play, they were particularly interested in and/or suited to scaffolding strategies, behaviours, and techniques as related to their growth in musical understanding. Both phases addressed the two research questions: *How do pre-school children scaffold their own and their peers' musical growth and understanding during musical play,* and *How do early childhood educators scaffold young children's musical growth and understanding during musical play?*

Data Collection: Phase One

This phase began with two initial observational visits to the nursery school which enabled me to become familiar with the physical space, the children, the teachers, and the parents. During these initial observation times, I spoke informally with the teacher and

teacher assistants and explored topics regarding their views on play, their thoughts regarding music programs for young children, and their ideas about play as a strategy for teaching music. These discussions helped me build rapport and trust with the teaching staff.

The focus of Phase One involved observing and documenting the activities of all of the children during play and musical play. Aspects of their musical play were documented through transcribed observations, digital video tape recording, still photographs, and journal entries. Incidents that may be regarded as scaffolding during play and musical play were noted along with many of the other activities in which they participated. Field notes included documentation of the activities of the children during musical play, descriptions of the environment, and notes regarding teachers' actions and interactions when the children were engaged in play and musical play. Observations of instances of scaffolding between peers and/or between child and teacher during all aspects of the school day were recorded. This phase took approximately three weeks and during this phase I carefully observed the children in order that I might identify three children who demonstrated an affinity for musical involvement during times of musical play so that I could identify their zones of proximal development and observe how, if at all, scaffolding, between peers or with teachers, would occur.

Data Collection: Phase Two

The second phase of the research addressed both of the research questions with a focus on the three identified children. The three children stood out because of their

interest in developing their musical understanding during times of musical play. The children included in the second phase of the study are, as Stake (2003) describes, "cases within the case" (p. 153). Stake (2003) points out that in choosing the cases within the case "training and intuition tell us to seek a good example . . . [and] balance and variety are important; opportunity to learn is of primary importance" (p. 153). The identified children were one boy, Ronnie, and two girls, Hannah and Chelsea. They were observed and documented as they participated in musical play and interacted with the other children and adults. They were not treated differently from the other children in the nursery school.

Mrs. Pauls and I both worked with the three identified children individually and in group settings as they participated with other children in the naturalistic setting during musical play. We observed and supported them in a variety of ways that might possibly extend their musical skills and understanding. The application of these strategies was examined and compared to those scaffolding strategies that had been identified in the related literature.

Summary of Data Collection Process

Phase One

- Research questions: 1) *How do pre-school children scaffold their own and their peers' musical understanding during musical play,* and 2) *How do early childhood educators scaffold young children's musical growth and understanding during musical play?*

- Observed and documented play and musical play activities and incidents of scaffolding with all nursery school children
- Created field notes from journal entries, researcher and research assistants' observations and notes, digital video tapes, and photographs
- Noted incidents of scaffolding as they occurred

Phase Two

- Research questions: 1) *How do pre-school children scaffold their own and their peers' musical understanding during musical play,* and 2) *How do early childhood educators scaffold young children's musical growth and understanding during musical play?*
- Identified three children (one boy and two girls) during the second month of the study who engaged naturally and spontaneously in musical play and were particularly attracted and open to scaffolding strategies with their peers, with teachers, and with themselves (i. e., self-scaffolding)
- Observed and documented musical play activities and incidents of scaffolding with the three identified children
- Created field notes from journal entries, researcher and research assistants' observations and notes, digital video tapes, and photographs

Interpreting the Data

There were two phases involved in the interpretation of the data for this study. Phase One addressed both of the research questions from a perspective that involved all of the children who attended the 4-year-old nursery school program. Phase Two addressed the research questions from a perspective that focused on three of the children who were enrolled in the 4-year-old nursery school program. These children had been identified as those who engaged naturally and spontaneously in musical play and were particularly attracted and open to scaffolding strategies with their peers, with teachers, and with themselves (i. e., self-scaffolding).

The many-faceted, complex nature of the early childhood classroom required that the research questions 1) *How do pre-school children scaffold their own and their peers' musical growth and understanding during musical play,* and 2) *How do early childhood educators scaffold young children's musical growth and understanding during musical play?* be answered simultaneously from two vantage points. I needed to consider and identify scaffolding as it occurred within the classroom while all of the children and adults were interacting together during times of musical play. At the same time, I also had to be aware of the activities and interactions of three individual children who were demonstrating their affinity for growth in musical understanding during musical play. The intricacies and complexities of the classroom environment during play and musical play posed a challenge for me as a researcher as I endeavoured to make sense of all that was occurring and at the same time represent, analyze, and interpret the actions and interactions in a way that would answer the research questions. Four levels of analysis

were involved in leading to the interpretation of the data and addressing the research question.

Level One: Initial Analysis: Organizing and Collapsing the Data

The first level in the data analysis for this study involved my reading and chronologically organizing the research assistants' field notes. This level was ongoing throughout the study and at the conclusion of the fieldwork, following the data collection, I combined the assistants' hand-written documentation with my hand-written journal entries and observational field notes. The collective documentation was chronologically entered into the computer. This combination of daily, transcribed observations from all four viewpoints (the three research assistants' and the researcher's) provided an initial description of the interactions and activities of the children and the teachers. These descriptions included observations of play and musical play.

Once the daily observations were transcribed and organized chronologically, the video tapes from each day were viewed. I had previously downloaded video tapes from the camera to the computer on each day of the field work. The ability to view the video tapes on the computer allowed me ease of observation, efficient revisiting of scenes, and the ability to quickly locate particular sequences, interactions, and conversations.

As I chronologically revisited each of the videos, the children's and teachers' actions, conversations, discussions, questions, interactions, and so forth were transcribed and entered into a second computer. Subsequent viewing of each day's videos allowed me to check for and add further details that may have been missed. All of the

transcriptions from the videos were chronologically organized in order that they could be compared to the written transcriptions, which had been generated by the field notes.

I also viewed the still photographs and examined each for the additional detail and information that they could provide to the data. I was interested in how these photographs could contribute to the picture of musical play and scaffolding in the nursery school classroom. Triangulation was achieved by including the data from the four different sources: research assistants' field notes, researcher's journal and field notes, digital video tapes, and still photographs in the final transcription.

The challenge I felt in organizing massive amounts of data generated in a qualitative research study is well documented. Miles and Huberman (1994) note the expanded use of qualitative research methods and the pervasive issues that are associated with its data analysis such as: labor intensiveness and extensiveness; data overload; researcher bias; time demands associated with processing and coding data; generalizability of findings; and the credibility, quality, and utility of conclusions. They also recognize that, "No study conforms exactly to a standard methodology; each one calls for the researcher to bend the methodology to the peculiarities of the setting" (p. 5). Patton (1990) confirms the demands of analyzing qualitative data and points out that "the challenge is to make sense of massive amounts of data, reduce the volume of information, identify significant patterns, and construct a framework for communicating the essence of what the data reveal" (pp. 371–372).

Observing children and noting all that took place within the nursery school classroom posed many challenges because of the number of children and the many

interactions in which they were engaged. The complications associated with classroom observations are noted by Boostrom (1994). He views the classroom as a complex setting in which the qualitative researcher is challenged by what he/she should "pay attention to" (p. 51). He argues that the researcher's best guide is the environment itself and that through observation the researcher (observer) proceeds through six stages ranging from videocamera to reflective interpreter. Boostrom continues by indicating that, "Deciding what to examine seems to require that an investigator possess a deep understanding of an environment before beginning to study it" (p. 51). Because of my strong and lengthy background in education and my knowledge and understanding of educational settings, I was able to confidently approach this research analysis from all perspectives as described by Boostrom: videocamera to reflective interpreter. Best and Kahn (2003) confirm the importance of the researcher's understanding of the studied environment when they state, "The interpretation of qualitative research data is more dependent on the researcher's background, skills, biases, and knowledge than on conclusions drawn from quantitative research, that are derived more directly from the numerical data" (p. 259). Schwandt (2001) reminds us of the place of reflexivity in qualitative research in relation to the "process of critical self-reflection on one's biases, theoretical predispositions, preferences, and so forth" (p. 224).

It was vital for me to keep the research questions at the forefront as I compiled the data during level one. Merriam (1998) acknowledges the questions asked and their "relationship to the end product" (p. 31) as a unique characteristic of case study research. The strength of the interpretation of the data lies in the relationship between the research

question and this end product. She emphasizes the importance of including "rich, thick description [from which] conceptual categories" (p. 38) can be developed. The chronology that was built from all of the sources of information provides the richness and thickness of description of which Merriam (1998) speaks.

Level Two: Vignettes Depicted Through the Lenses of the Research Questions and the Related Literature

In the second level of analysis I identified, from the level one data, episodes of musical play in which scaffolding occurred and then wrote a series of vignettes which chronologically described children's and teachers' actions and interactions observed during play and musical play. The related literature provided guidance in identifying incidents of scaffolding during times of musical play. To assist in my identification of scaffolding within a musical play context I looked to Wood et al. (1976) and their original definition of scaffolding in the seminal article that addressed the role of the tutor within a learning environment. They defined scaffolding as "the means whereby an adult or 'expert' helps somebody who is less adult or less expert" (p. 89).

The study carried out by Wood et al. (1976) has prompted many researchers and scholars in a variety of curricular areas to relate the term scaffolding to the teaching and learning process. While minimal research that addresses scaffolding has been conducted in early childhood unstructured musical play settings there has been extensive research and discussion that identifies the characteristics and qualities of scaffolding within a variety of other curricular areas (Berk & Winsler, 1995; Gaskins et al., 1997; Hogan,

1997; Hogan & Pressley, 1997; Jordan, 2004; Meadows, 1993; Ortega, 2003; Roehler & Cantlon, 1997; Wood & Attfield, 2005). In collaboration with the work of MacNaughton and Williams (1998), de Vries (2005), in his study of scaffolding as related to teaching singing with a 2-year-old child in an unstructured teaching context, identified the following scaffolding strategies:

- Questioning
- Prompting
- Praising
- Confirming
- Providing Feedback
- Expanding
- Repeating back
- Joint problem solving
- Modeling

Vignette, as defined by The *Oxford Dictionary* (1999) is "a brief evocative description, account or episode" (p. 1598). To further elaborate upon the meaning, this dictionary describes evocative as that of bringing or recalling to the conscious mind "strong images, memories or feelings" (p. 494). Stenhouse (1988) indicates that a vignette associated with case study research "crystallizes some important aspect of the case" (p. 52). Bassey (1999) elaborates on the descriptive nature of a vignette and notes that "descriptive passages within the research report will enrich its texture and contribute generally to a better understanding of the case" (p. 88). Each vignette included in this

study portrays an episode or series of episodes that were significant in answering the research questions. Erickson (1986) identifies this stage of the analytical process as the particular description "in which the sights and sounds of what was being said and done are described in the natural sequence of their occurrence in real time" (pp. 150–151). The descriptive nature of the vignettes will endeavour to portray that which occurred during play and musical play in a way that will, as Bassey states, "be appropriate for the chosen audience" (p. 72).

The first series of vignettes is found in Chapter Four and are identified as Phase One vignettes. They address both research questions and involve any and/or all of the 4-year-old children who attended the nursery school along with their teachers. To provide an initial image of the nursery school, the first vignette describes the interactions of the children and their teachers on the day before the expanded musical play centre was introduced. The vignettes which follow focus more specifically on the incidents of musical play.

During the observations of all of the children I identified three children who emerged as those who engaged naturally and spontaneously in musical play and who were particularly attracted and open to scaffolding strategies with their peers, with teachers, and with themselves (self-scaffolding). Phase Two includes the second series of vignettes which focus on each of the three identified children and address both research questions. These vignettes are found in Chapter Five.

Level Three: Addressing the Research Questions

The definition of scaffolding provided by Wood et al (1976) in conjunction with the identified scaffolding strategies assisted me in the initial identification of scaffolding behaviours that occurred during musical play. As I moved back and forth between the data, as depicted in the vignettes, and scaffolding, as described in the related literature, I was able to identify incidents of scaffolding during musical play. I colour coded these incidents according to the list that I had generated from the literature and then used these colours to identify those incidents that could be classified as scaffolding during times of musical play. The colours assisted me in seeing the emergence of recurring trends and possible themes. The process was similar to the forward and backward arc in interpretive inquiry as described by Ellis (1998): "one uses 'forestructure' to make some initial sense of the research participant, text, or data . . . in the backward arc, one evaluates the initial interpretation and attempts to see what went unseen before" (p. 26).

Miles and Huberman (1994) argue that the "findings from qualitative studies have a quality of 'undeniability' [and that] words, especially organized into incidents or stories, have a concrete, vivid, meaningful flavor that often proves far more convincing to a reader—another researcher, policymaker, a practitioner—than pages of summarized numbers" (p. 1). They describe "ethnographic methods [as tending] toward the descriptive" (p. 8) with the analysis task as reaching across multiple data sources followed by the condensation of the data and deliberation of continuous analytic choices. The quest for relationships, patterns, themes, and sequences are identified by Miles and

Huberman as analytic practices that are used "across different qualitative research types" (p. 9).

Gall, Gall, and Borg (2005) describe three approaches that can be used to analyze data in qualitative case study research. They look to the work of Tesch (as cited in Gall, Gall, and Borg) who classified these approaches into the following categories: "interpretational, structural, and reflective analysis" (p. 315). They maintain that interpretational analysis "involves a systematic set of procedures to code and classify qualitative data to ensure that the important constructs, themes, and patterns emerge" (p. 315). The second identified analytical approach is structural analysis which "involves a precise set of procedures for analyzing qualitative data that do not need to be inferred from the data but are inherent features of the discourse, text, or event that researchers are studying" (p. 316). Gall, Gall, and Borg indicate that it is used in "narrative analysis, ethnoscience, and other qualitative research traditions. [They maintain that the researchers] need to engage in very little, if any, inference to arrive at [the] findings" (p. 317). Morse (1994) describes this process as synthesis and indicates that

> synthesis is facilitated by the process of coding and content analysis. By pooling data from all transcriptions and notes, categories are constructed and data are linked both from one participant and between participants. Synthesis has occurred when the data are saturated—that is when no new categories emerge. (pp. 37–38)

Level Four: Commentary

Each vignette is followed by a reflective commentary that is intended to assist the reader in connecting the actions described in the vignette with the literature related to scaffolding. Merriam (1998) notes the importance of achieving balance between description and interpretation and Erickson (as cited in Merriam, 1998) maintains that "a differentiation among particular description, general description, and interpretive commentary may be helpful in determining this balance" (p. 235). Particular description is described as "narrative vignettes of everyday life in which the sights and sounds of what was being said and done are described in the natural sequence of their occurrence" (Merriam, 1998, p. 235). General description is explained as that which is "needed to tell the reader whether the vignettes and quotes are typical of the data as a whole" (Merriam, 1998, p. 235). The interpretive commentary, according to Merriam (1998), "provides a framework for understanding the particular and general descriptions" (p. 235). Erickson (1986) notes that "the interpretive commentary is necessary to guide the reader to see the analytic type of which the instance is a concrete token. . . . Interpretive commentary thus points the reader to those details that are salient for the author, and to the meaning-interpretations of the author" (p. 152). Erickson also maintains that the commentary is necessary in order that the "reader is not lost in the thicket of uninterpretable detail" (p. 152). For the purpose of precision in this study I have included both the general description and the interpretive commentary within the Commentary section that follows each of the vignettes.

Summary

The following summary provides an overview of the process that was followed in the interpretation of the data for this study.

Level One: Chronological organization of data from all sources.

Level Two: Vignettes which describe the daily activities of children and teachers during musical play through the lens of the research questions.

Level Three: Identification of scaffolding incidents during musical play in consultation with related literature.

Level Four: Commentaries which interpret the actions within the vignettes according to the research questions.

Level Five: Synthesis of all commentaries.

Limitations of the Study

Scholars of qualitative research acknowledge the limitations of case study research. They indicate the purpose of case study research as being the representation of one case and not the representation of the world (Stake, 2003). Keeping this in mind, it is vital to acknowledge that qualitative case studies have issues of reliability, validity, and generalizability" (Guba & Lincoln as cited in Merriam, 1998, p. 42). Guba and Lincoln indicate that even though there may be a tendency to view case studies as "accounts of the whole . . . they are but a slice of life" (as cited in Merriam, 1998, p. 42). The findings of this case study are specific to this setting. Peshkin (1993) indicates that the goals of

qualitative case study research are to gain insight, extend understanding, refine knowledge, and enable teachers in similar settings to examine their own practices.

Another limitation concerns the bias that the researcher brings to the study. Bogdan and Biklen (1992) note that "data collection must bear the weight of any interpretation, so the researcher must constantly confront his or her own opinions and prejudices with the data" (p. 46). I have acknowledged my bias and endeavoured to address this bias "by recording detailed field notes that include reflections on [my] own subjectivity" (Bogdan & Biklen, p. 46). Triangulation has been ensured through the documentation of multiple sources of information in the form of video tapes, research assistants' written observations, journal entries, and documentation of artifacts.

CHAPTER FOUR:

DATA ANALYSIS: PHASE ONE

VIGNETTES

Overview

The following vignettes for Phase One address both research questions and include all of the children who were enrolled in the nursery school's 4-year-old program. They are comprised of a compilation of the data told through vignettes which describe the activities of the children and their teachers during play and musical play times. The first vignette describes a day in which the children are engaged in activities not related to musical play. The purpose of this vignette is to provide a context from which the research began. The subsequent vignettes are compiled from the first 3 weeks of data collection and describe incidents in which the children are involved in musical play. All vignettes are examples of the "rich, thick description" (p. 211) of which Merriam (1998) speaks in relation to "providing enough description so that readers will be able to determine how closely their situations match the research situation, and hence, whether findings can be transferred" (p. 211). Each vignette is followed by a commentary. The commentary provides "a framework for understanding" (Merriam, 1998, p. 235) the described vignette and its relationship to the research questions which are being explored.

The nursery school year was organized according to a variety of themes. The themes were chosen by the teacher to correspond with seasons (e. g., spring), western holidays and special occasions (e. g., Valentine's Day), and topics which traditionally were perceived as interesting for children (e. g., fish and sea life). A theme based on the

sea and creatures of the sea was in progress when the research began. The children were engaged in a variety of activities including: worksheets, booklets, arts and crafts projects, singing, and other non-structured play-based activities, all focusing on the sea life theme. Mrs. Pauls had organized centres at which the children could actively participate. They could fish for a variety of plastic sea creatures, paint, draw, look at picture books, and dramatize with puppets, masks, and costumes. Many of the play centres were focused on this sea theme. The children were able to make choices from these and other centres including the dress-up centre, the kitchen/house centre, and puppets and a puppet theatre. There was an expectation that the children would complete their structured writing, drawing activities before engaging in the centres of their choice. This routine was altered somewhat when the research project began and the children were then provided with more choice and additional time in which they could engage in play activities.

Vignette One: February 1, 2007: Music and the Sea: Setting the Scene

The research began on a cold February morning. I chose to spend it alone, without the help of the research assistants, in order that I would have an opportunity to observe the children as they interacted with each other and their teachers. I wanted to see the daily routine in action and begin to compile my field notes. This observation time also gave the children a chance to begin to get to know me for it was planned that I would be working in a participant/observer role. This day also provided an opportunity to gather other information regarding the classroom organization that I would be able to share with the research assistants, who were scheduled to begin their work the following day. The

research assistants would work mostly as observers, however, because of their classroom presence it was anticipated that the children may call on them to answer questions, engage in conversations, and interact in a variety of ways (e. g. helping, playing, listening, watching).

As the children arrived at nursery school they were free to go to their choice of many different centres. This was an established routine that assisted with the organization of the day. Since the children did not all arrive at the same time, there was some flexibility as to when the daily routine would begin. The somewhat flexible arrival time was set aside for the children to visit, play, and interact with each other. It also gave Mrs. Pauls, the teacher, time to answer parent questions, converse informally with children and parents, and respond to parent concerns.

The children knew the routine very well and as they arrived they played together at a variety of centres. Tyler played by himself at the ring toss and Michael, Ethan, and Matthew played with large foam building blocks, each making his own form as they engaged in conversation. As more children arrived, the group that was playing with the blocks increased in size. Madison entered, sat down at a table, and said that she wanted to work on some printing. Mrs. Pauls responded to her request by asking a variety of questions about what she wanted to print and then demonstrating the process for forming some of Madison's chosen letters. At 9:00, when most of the children were in attendance, the daily pre-reading/writing activities began and the children were each given a booklet that contained an outline of the word "octopus." Hannah told her friends, "You have to write octopus. I know that you have to start with o." Mrs. Pauls then said, "Now you have

to make a c." A small group of children began to sound out the word as they printed it. Many of the children in the group were contributing to the development of the understanding of spelling as they printed the word "octopus." Mrs. Pauls and Valerie, the teaching assistant, continually praised the children's progress and assisted them in achieving the next step in the process by using words and phrases such as: "good" and "now like this." Michael proudly showed his work to Mrs. Pauls and exclaimed, "I did my word!"

While the children were working they discussed many topics. Some asked questions such as "Can octopus' change colour?" and others made proclamations about what they were going to do such as, "I'm going to make my octopus red." Many different topics were discussed at the tables as the children coloured, glued, and printed. Together, the children and the teachers engaged in lively conversation. The children watched each other, showed their work to the teachers and their friends, and demonstrated the eating pattern of an octopus through a dramatization. As they were gluing Cheerios on to the octopi their conversations included the following topics: things their parents like to eat, "My dad bites shrimp;" things they (the children) like to eat, "I have Cheerios at my house;" things they have done, "One time I went on a sleigh ride;" and their recognition of colours. Mrs. Pauls occasionally stopped the whole group to give instructions on a certain part of their project, e. g., the process for putting glue on a specific part of the octopus and then placing the Cheerio on the glue. She initiated a conversation about the suction cups that are found on the octopus and then presented leading questions regarding other places that suction cups might be found and where they might find them in their

own homes (on a bath mat). During this progression I observed a number of children helping each other with their projects and saying things such as, "You're not done, you need to glue like this," as they demonstrated and provided assistance.

When the children had completed their projects they were free to go to the centres and play with the materials of their choice. This organizational strategy was used by Mrs. Pauls to accommodate for variations in project completion times, to provide opportunities for individual assistance, and to acknowledge the value that she placed on opportunities for free play.

Many items related to the sea theme had been placed around the classroom. Ethan found an octopus mask and was very excited about his find. He tried to put it on but had a difficult time making it fit. Finally after a number of unsuccessful tries, he gave up in frustration and headed for another centre. All the while, Hannah had been watching him struggle and she decided to try on the mask. She also noticed that Ethan had forgotten a toy and she called him back so that he wouldn't lose his toy. He began to play at a centre that had pictures of sea creatures along with their beginning letters. Ethan practiced by saying the words out loud. He asked himself, "What does octopus start with?" He matched the pictures with the letters of the beginning sounds. He continued this play with words for an extended period of time. At the same time, Sam was reading and drawing his own detailed sea pictures. He explained, "These are buddies," as he drew two fish. Ethan had now joined Sam and he said, "This is a starfish laying on a rock and this one is dancing in the water." He went on to discuss many of the things that he was including in his art. As he showed Ethan his work, Sam said, "I'm making the water look like the

ocean. First, I colour like this, then I lick my finger and spread it and make it look like the ocean. This is the wave. The wave broke the glass. I'm making this water. They're (the fish) all pets of one human and the people are filling up the water (in the fish bowls). I want the fish to be free. They should free the fish. Now the goldfishes are happy. They're splashing in one another's bowl. Being nice to one another is part of friendship." Mrs. Pauls had explained to me that Sam was experiencing difficulties making friends with the other children and occasionally children had complained about him. Even though he tried to be friendly, other children often interpreted his friendliness as bossiness. The comment that he made regarding friendship may have been in reference to his previous conversation with Mrs. Pauls, who was assisting him to interact positively with others.

Another group of children was busy working at the painting table. Mrs. Pauls sat at the table and asked questions about some of the painting techniques they were using. Meagan told everyone, "If you use less water it will be shiny." The conversation grew and changed from painting techniques to discussions about cousins and names, ages, and sizes. Ashley invited Madison to call her on the telephone and said, "I live in Edmonton and if you want to phone me just call 445–9867." Madison replied, "I don't know my phone number," and at this point Mrs. Pauls said, "Maybe you'll learn your phone number." She continued by reminding Madison that she had a list of all the nursery school children at home and that beside everyone's name was their phone number. This list would be helpful if she wanted to call a friend from nursery school. I noticed that while the children were at the painting table some were very verbal and discussed a wide variety of topics as they were working. Others were happy to sit quietly and listen and

watch as they were painting. The conversation went back to phone numbers as Sarah talked about having a secret birthday party. (I don't know if it was a secret birthday party because everyone in the nursery school was not going to be invited and she didn't understand that all of the children were not to be told or if there was some other explanation. At this point the "secret" birthday party was no longer a "secret"). She also told everyone about a recently attended birthday party which had a piñata that was filled with prizes that came out when the children pulled at it. Many of the children at the table began to ask Mrs. Pauls for the phone list so that they could start calling friends and she reminded them that they all had a list at home and perhaps they could ask their parents to show them the list. It seems that the list that had been handed out early in the school year was now more important to the children.

The children were to mount their paintings on a piece of construction paper and they were involved in making decisions about which colour they liked the most or which colour looked best with their painting. They were encouraged to make their own choices as they made comparisons of their art mounted on different coloured backgrounds. Mrs. Pauls posed questions such as, "What do you think of red or blue?" The children continued to finish their paintings and were happily examining each other's work. Mrs. Pauls said to Hannah, "I see that you are using a lot of green and yellow." She replied, "I have three different colours. I like green, blue, and yellow."

There was a fishing tank at one of the centres. The children could fish for magnetic fish and when they were caught they were to be put in another tank that was beside the fishing tank. Emma was heard asking Olivia, "Why did they go in?" A tank

that contained water was also available and the children could try to snag a fish with a small hooked fishing rod. Sam enjoyed this centre and played for a long time. He said that he was a fisherman and then remarked, "This fish is poisonous." As he played with Daniel he said, "I got a fish," and Daniel said, "Let's cook it up for dinner." Sam continued his previous conversation about friends and friendship when he asked, "Want to see all my new friends? Who are my sea friends anyway? I see your sea friends—we play nice." He then began to sing his version of *Row, Row, Row Your Boat* with an especially loud, "merrily, merrily, merrily, merrily." It was interesting to hear another child from across the room join in with the singing of the song's ending.

At the painting table the children were engaged in conversations and used funny voices as they happily completed their work. The children were responsible to independently change their water and clean up after their painting was complete. Mrs. Pauls noticed Ashley talking on a toy phone. Mrs. Pauls asked, "Who are you talking to?" Ashley replied, "My brother." The next question was, "What does he say?" She replied, "I love you!"

All the while Justin and Tyler were playing with puppets, including a few fish puppets. They were negotiating as they dramatized the story they called, "Crabby Crabby." The conversation proceeded in this way. "This is kind of . . . that can swim in water. I think you be . . . and I'll be . . . You can be the big brother. There's no mother—only a dad. (They made a water slide and began some improvised singing using a light, high singing voice). One of the children asked, "Could that be his mother?" They were

very actively engaged in discussing the puppet play and asking questions as they proceeded with their dramatization.

The free play time ended and Mrs. Pauls called all of the children to have their structured music time. They were all busily involved in the cleaning up routine and in no time they were ready for their music class.

Vignette One: Commentary

The children and their teachers engaged in dialogue and conversation during this part of their nursery school day. Dialogue, as defined by the *Oxford English Dictionary*, is discussion that is specifically focused on a subject or topic while conversation is an informal spoken exchange which moves more freely from topic to topic.

As the children worked on various art and writing projects, verbal directions were often given both by Mrs. Pauls, the teaching assistant, and the children themselves. At one point Mrs. Pauls and Hannah worked together alternating as they gave directions to the others. Hannah took the lead when she said, "I know that you have to start with o," and Mrs. Pauls followed her lead by adding, "Now you have to make a c." Mrs. Pauls listened carefully to the children so that she could join their conversations and extend the learning by expanding and enhancing that which was being said and done by the children. Scaffolding was included as both the teacher and children engaged in assisted performance and shared activity through their participatory questions and comments. On this day Mrs. Pauls could have possibly extended her use of scaffolding by asking questions such as, "What do you think we should print next?" An example of peer

scaffolding occurred when one child instructed his friend by saying, "You're not done. You need to glue like this." The verbalization along with the demonstration helped his friend complete the project.

Scaffolding occurred in a variety of ways. Ethan demonstrated self-scaffolding as he played at a centre that focused on matching words with beginning sound cards. He used his play time to question himself about the beginning sounds of a variety of words. Through private speech and verbalization he practiced words which were of interest to him. Finally, he reviewed by playing a self-created matching activity that related to his chosen words and which he had used previously in his self-questioning activity. Bodrova and Leong (2007) point to language as a "universal cultural tool that is applied in many contexts to solve a myriad of problems [and used] in speaking, writing, drawing, and thinking" (p. 65). They maintain that speech can be directed outwards to enable communication with others. Accordingly, they also draw attention to the notion that speech can also be directed inward allowing for communication with oneself and regulation of behaviour and thinking. Ethan demonstrated his use of his inwardly directed speech or private speech as he questioned himself. Vygotsky recognized play as a leading activity in learning that was limited to "the dramatic or make-believe play of pre-schoolers and primary school-age children" (Bodrova & Leong, p. 129). Ethan, with the support of private speech and self-scaffolding, pretended to be both the teacher and student as he practiced words that were interesting and important to him during his play time.

Through the phone number conversation the children demonstrated their place in the zone of proximal development as they discussed both their need and desire to remember their phone numbers. The discussion was directed by one of the children who had memorized her phone number and could now recite it to her friends. She recognized the value of knowing this number for she could orchestrate her social activities by inviting others to phone her. Those who did not know their phone numbers expressed an interest in also learning and they too communicated their understanding of the value of the class phone list. Many children wanted to learn their phone numbers and recognized that this knowledge would be helpful in contacting friends with whom they could play. It appeared that friendships were becoming more important to these children. Scaffolding was occurring through conversations and questioning both by Ashley who knew her phone number and Mrs. Pauls who added to the conversation and challenged the children to consider learning their phone numbers. Many contrasting levels of the development of the understanding of social interactions and friendships were observed: from Ashley, who invited others to phone her so that they could independently organize play-times, to Sam, who was using dramatization and private speech to describe his understanding of being a friend.

Sam, through his play and the conversations during play time, told us much about his continuing understanding of friendship. He was in the zone of proximal development of his social skills. Through pretend play he was telling us about his understanding of friends and the value of friendships. During his conversation with Ethan he demonstrated his beginning ability to be a friend as he explained, demonstrated, and shared his special

process for making "the water look like the ocean," and later when he said, "being nice to one another is another part of friendship." He also showed Daniel his "sea friends who play nice." These interactions are all examples of shared activity.

Conversations, demonstrations, and opportunities for coaching to extend and advance learning involved children and adults alike. Mrs. Pauls; Valerie, the teaching assistant; and the children were all involved as partners in learning. The play, the social environment, the thoughtful listening, and respectful acknowledgement of others were instrumental in the facilitation and scaffolding of learning on this first day. The intentions of the children were honoured and warm relationships were prevalent amongst the children and the participating adults. At times, the teacher's intentions were prominent and the children were interested in accepting invitations to participate in a variety of activities and then extend the activities and make them their own. St. John (2006) points to the way in which guidance is provided as central to the zone of proximal development and indicates that the teacher

> must have the ability to provide clearly presented concepts that invite and engage, feedback that is specific and facilitates critical thinking, and encouragement that fosters curiosity and a desire to discover. Children as agents of their own learning can devise and renegotiate the guiding foundation provided by the teacher, and transform the presented material, either independently or with assistance, to realize what they most need to know. *Who* [emphasis in original] provides the assistance and *how* [emphasis in original] it is provided frames effective scaffolding techniques. (p. 34)

Vignette Two: February 7, 2007: Instruments for Musical Play

Following my first day of observation I set up a musical play area in which the children were introduced to a variety of Orff instruments. The nursery school had very few barred instruments and so the addition and introduction of these instruments sparked much interest amongst the children. They began to explore the instruments in many ways. Mrs. Pauls and I reminded the children about treating the instruments respectfully. It was not an issue on which we had to spend a great deal of time because respect for everyone and everything is an expectation of the children and the adults at Wild Rose Nursery School. The instrument play area was available to the children almost as soon as they arrived. The children were very interested in participating in the musical play area and many spent most of the next hour interacting with the instruments in many ways. The following account describes several of the activities and interactions in which the children participated on this exciting morning.

The children were very attracted to the Orff instruments that were available. I introduced a variety of soprano and alto xylophones, metallophones, and glockenspiels as well as several unpitched percussion instruments. These would supplement the instruments that were already on hand at the school. The school did not have any Orff instruments with the exception of two soprano glockenspiels. Mrs. Pauls indicated that the previous owner of the school had purchased these and now she wished that xylophones had been purchased instead because she found that the glockenspiels were really too small for the children to handle effectively.

The children were invited to explore many of the play centres as was the usual procedure when they arrived at school. However, today the playtime was extended and the musical play area was considerably expanded from any time before. Mrs. Pauls spent a short time discussing the children's choices. They could paint, colour, use the costumes, play instruments, and so on. Together they discussed their options and had an opportunity to ask questions. She also showed them some of the Orff instruments and the children were very excited to have these included in their choices. They loved to move in closely and crowd together to be near the instruments and at one point Mrs. Pauls had to ask the children to back up so that they could all see.

Many children wanted to explore the new instruments. The children were respectful of the instruments and they explored them fully. I had set the instruments up in C Pentatonic and since the 4th and the 7th of the scale had been removed there were empty spaces on each of the instruments. The children were curious about these spaces and often filled them in with bars borrowed from other instruments. As the children began to explore the instruments, some played with one mallet, then with two. Children joined together and shared the instruments. Often two or more children played on opposite sides of the instruments and faced each other as they performed. Once they began to use two mallets they alternated hands during their improvised play. Christopher was seen playing with three mallets and Ethan had only one. After a short period of time Christopher, without any encouragement from the teachers or requests from Ethan, gave Ethan one of the mallets so that they each had two and they proceeded to play together. We could see children trying a variety of mallet techniques: playing with one mallet only, playing with

three mallets, crossing hands over each other, random playing all over the instrument, left hand playing on C while the right hand improvised a melody, playing repeated glissandos. All of this was going on at once with children very actively engaged in instrument exploration.

On the floor at the musical play centre were a variety of unpitched percussion instruments that the children could also use. We observed children trying many things with these instruments. Ashley chose a triangle and played it by holding it on the top and playing on the side. Without any instruction she seemed to know how to play this instrument. Madison chose the jingle bells and proceeded to play the soprano xylophone with her left hand while she played the jingle bells with her right. Hannah held the mallet by its head and played a sequence that began with the soprano xylophone, followed by the frog guiro, the wood block, the drum and then back to the soprano xylophone. She repeated a "ta, ta, ti-ti, ta" rhythm pattern twice on each instrument as she performed her sequence. Olivia briefly visited Hannah and added the jingle bells to Hannah's sequence and then she left.

Emma had been playing the triangle earlier and she now varied her playing style by placing the triangle in her lap and then performing on the triangle with her right hand and the drum that was by her side with her left hand. Samantha saw Emma playing the triangle, walked over and tried to take the triangle. "No, no," protested Emma as she took the triangle back. "You play it like this," she said as she demonstrated her playing technique. At this point she handed the triangle back to Samantha who joined Emma in the performance. They played together matching each other's beat. This joint playing did

not last for a long time for Samantha decided instead to try the frog guiro which she played in a variety of ways: striking with a stick, striking with her hand, and rolling the stick over the top.

Some children changed instruments very quickly while others stayed and experimented and performed for long periods of time. Daniel was interested in playing the alto xylophone and played the same note over and over. The research assistant remarked that she thought that he was experimenting with his ability to perform loudly and softly. He then changed and played the triangle.

Ashley, Meagan, and Chelsea were all interested in playing the xylophone. When Meagan tried to leave, Chelsea insisted that she have a mallet and the three friends played the xylophone together. As Ashley held the mallets to her ears and listened, she rubbed the ribbed handles together. After listening for a short time she shrugged her shoulders and continued to play on the xylophone. As Daniel and Christopher played the alto xylophone together Christopher told Daniel not to play too hard or the bars would fall off. Josh joined them and each played the xylophone with a mallet in his right hand and jingle bells in his left. The repeatedly played "ta, ta, ti-ti, ta."

Ronnie experimented with pitch as he alternated playing with two mallets in one hand and then one mallet in each hand. Olivia and Hannah played very loudly on the soprano xylophone and Olivia proudly announced, "I have a red one and I have this one," as she described her mallets. Many other children were examples of welcoming behaviour as they invited others to join them as they played many of the Orff instruments. Children often took their time entering the musical play area after spending time as

observers. We noticed many pairs and small groups of children happily playing together. They freely came and went and we overheard children saying things like, "You can use that one too," referring to available mallets and "It's fun to play. Right?" Emma said, "I'm doing it with one hand," as she held two mallets in one hand. Children encouraged each other through invitations such as: "Want to try this one?" and "I'll play this one and you play the other one."

This free musical play continued for a long period of time and as quickly as it started it ended as many children decided to change and go to an area that had a large number of masks that were related to their sea theme. Several children wanted to show Mrs. Pauls what they looked like as they donned their masks and she took this as an opportunity to sing a fish song that they had learned in their structured music lesson. Some children joined her in the singing. She then showed them an octopus costume and discussed the ink that the octopus emits. Sam said, "Do you know where I live? I live in the sand." Mrs. Pauls said, "The octopus is gentle. She squirts the ink and then she is gone." She then indicated that it was time for those children who had masks to pass them to children who had not yet had a chance to wear them and who were waiting for their turns. Justin and Tyler were at a table and Justin remarked, "I am teaching Tyler how to draw a fish." At the same time many children were engaged in a dramatization of the octopus in the sea with the help of masks, scarves, and the octopus costume. With his octopus mask and a scarf, Sam said he was camouflaged by hiding in the seaweed.

The children gradually began to return to the instrument play area. Ashley chose to play the soprano xylophone and she alternated her playing with clicking the mallets

together. She then took her mallets and moved to the alto xylophone. When she reached her new instrument she quickly tossed the alto xylophone's mallets over to the instrument that she had just left. She was visited briefly by Justin, who was dressed in a costume. He wanted to play the alto xylophone but Ashley stood her ground and suggested that he play the soprano instead. He played for a very short time and went on to explore something else.

The children continued to enthusiastically explore many instruments that day. They often played side by side or across from each other. Some were seen changing the bars and even though the bars were sometimes put in upside down the children did not seem to mind and happily played them the way they were. Madison joyfully played the alto xylophone and moved her body side to side in a dance-like way. Instruments were played in unconventional ways. Justin was an example of this as he played the handle of the drum with a triangle mallet while Daniel used a hollow mallet for a whistle. Andrea accompanied her ABC song on the triangle. Matthew played the alto xylophone for 25 minutes while many others moved back and forth between instruments and other kinds of play. Occasionally, Mrs. Pauls intervened and worked with children who were experiencing difficulties sharing. She did this through modeling and having children take turns with her. She participated as their partner during their musical play. She also danced with the children and invited them to dance with her as she sang one of their known songs. Emma played a repeated syncopated rhythm on the frog guiro as the other children danced with Mrs. Pauls. Madison donned a tiara and skirt and danced as if she were a ballerina. Other children accompanied the dancing as they played their improvised songs.

The unstructured play time ended for the day and the children cleaned up and prepared for their structured time.

Vignette Two: Commentary

This was a day of exploration. The new instruments and the musical play area were exciting for the children and they enthusiastically explored instruments individually and with others. They experimented with sounds and played the instruments in conventional and non-conventional ways. They worked together in pairs and small groups as well as by themselves. They moved freely from one choice to the next, sometimes spending a short time at an instrument and often spending long periods of time playing in the music centre. The interactions of the children on this day confirm the findings of Smithrim (1997) who observed that when children are engaged in musical play they are absorbed for long periods of time, use instruments in unconventional ways, and involve themselves in peer teaching and modeling. All of these characteristics were evident at the Wild Rose Nursery School on this day.

The day on which the expanded musical play centre was introduced provided the children with many opportunities to experience music through play. Addison (1991) acknowledges the importance of musical play and laments that, "many children are being crippled musically by being deprived of the opportunity to play with musical materials in the same way that they play with other play objects" (p. 212). Kalekin-Fishman (1986) indicates that,

> teachers do not single out either melodic or rhythmic manipulations of sound for attention or reflection [unlike in art related projects where] pieces of work are often held up for the whole class to admire. Spontaneous productions of sound on the other hand, are either ignored or dismissed as 'noise' and 'a nuisance.' (p. 61)

Through this free musical play experience the children had many opportunities to explore and experiment with sound. The importance of this aspect to the investigation of scaffolding as it is applied to early childhood music education is central to this study.

With the help of the teacher, teaching assistant, and the research assistants, I organized the environment so that the children would have many, varied opportunities to participate in musical play. Wood and Attfield (2005) point out that the concept of assisted performance is central to the understanding of socio-cultural theories. They indicate that assisted performance is defined as "what a child can do using internal motivations and capabilities, but with support from more knowledgeable others and from the learning environment" (p. 104). Bodrova and Leong (2007) note the importance of understanding the zone of proximal development in relation to comprehending the notion of assisted performance. They remind us that within a Vygotskian framework

> development of behavior occurs on two levels that form the boundaries of the ZPD [and that] the lower level is the child's *independent performance* [emphasis in original] . . . the higher level is the maximum the child can reach with help and is called *assisted performance* [emphasis in original]. (p. 40)

They indicate that:

> the level of assisted performance includes behaviors performed with the help of, or in interaction with, another person, either an adult or a peer [including] . . . giving hints and clues, rephrasing questions, asking a child to restate what has been said, asking the child what he understands, demonstrating the task or a portion of and so on. (pp. 40–41)

They also include indirect help "such as setting up the environment" (p. 41) as an example of an assisted performance interaction. Wood and Attfield (2005) remind us that the "people and the resources around the learner provide a *scaffold* [emphasis in original] which supports the transition from dependent to independent activity" (p. 104). Within the Vygotskian framework then, organizing the environment can be considered an example of assisted performance which, as Bodrova and Leong (2007) indicate, could be regarded as one of the scaffolding strategies employed by more knowledgeable others. I was providing this scaffold in order that we might assist the learners in experiencing musical play (Wood & Attfield, 2005). Through play each child could make his/her individual choices regarding the activities in which they wished to participate, the length of time for participation, with whom they wished to play, and the materials they wanted to use. Wood and Attfield (2005) note that the creation of shared zones "is not a difficult concept" (p. 102). They elaborate on this notion when they say that, "Children create their own ZPD through their play and self-initiated activities, which enables them to express their interests, dispositions, motivation, ongoing cognitive concerns and play themes" (p. 102).

The social nature of the musical play was prominent and we saw and heard many children interacting with each other as they played, discussed, and sang. They often observed, copied, and encouraged each other as they performed together. Bodrova and Leong (2007) explain that:

> social context plays a central role in development, because it is critical for the acquisition of mental processes. . . . Children learn or acquire a mental process by *sharing* [emphasis in original] or using it when interacting with others. Only after this period of shared experience can the child internalize and use the mental processes independently. (p. 11)

They point out that there are many ways in which activity can be shared by two or more people (e. g., using strategies or concepts with the support of another, working together to solve problems, working together to ask and answer questions). Bodrova and Leong (2007) also note that:

> the word *assistance* [emphasis in original] is an essential part of the definition of the zone of proximal development. . . . Thus, shared activity is a means of providing the assistance children need at the higher levels of the ZPD. To promote learning, teachers must create different types of assistance and consequently different types of shared activity. (p. 79)

They continue by emphasizing that, "Shared activity provides a meaningful social context for learning" (p. 80).

This time of musical play offered the children many opportunities to experiment with sound. Swanick (1988) points out that the "early flowering of musical

expressiveness frequently bears little relationship to recognizable musical conventions and seems to derive directly from the pleasure of manipulating sound materials" (p. 66). This pleasure was especially evident on this day. Wood and Attfield (2005) note that as children create their own zones of proximal development through their musical play and their self-initiated activities "the zones that children create may not always be approved by adults because they create their own rules, games, and ways of knowing" (p. 102). During musical play, children often create unique ways of approaching music and make music that may not necessarily be acknowledged as music by adults.

Today the teacher participated and interacted with the children through shared activity and assisted performance. With the use of strategies such as modeling and encouraging remarks, Mrs. Pauls responded to children who were experiencing difficulties with the concept of sharing. She responded to Emma's improvised music-making by dancing and inviting others to join her. Her positive response to the child's composition acknowledged and encouraged but did not direct the experience. Scaffolding occurred through assisted performance and shared activities when the children encouraged and directed each other in instrument-playing techniques and decision making regarding instrument choices. This occurred through dialogue and conversation, modeling, thinking together, and the sharing of materials and ideas. The children's involvement in shared activities with each other and their teacher was evident in our observations. St. John (2006) points to shared activities as "more conducive to learning than independent work" (p. 37).

Vignette Three: Instruments, The Sea, and Swimmy

It was Friday of the first week and as the children arrived at school they were invited to go to a centre of their choice. The musical play area was included as one of the choices and many children chose to explore instruments as others arrived. The cabasa was especially interesting to Daniel. He played it in a variety of ways—shaking, playing with a mallet, and scraping. As Ronnie arrived at the musical play area, Daniel asked if he wanted to try the cabasa. Ronnie asked, "What is it?" Daniel replied, "You wiggle it." The two friends continued to play together and explored the many ways that they could play the cabasa. At the same time, Daniel experimented with the xylophone's high and low sounds as he alternated mallets. He and his friends experimented by removing and adding different bars to the instrument so that all three children could play at once. On his soprano xylophone, Tyler constructed a melodic sequence consisting of high, high, low, low, middle, middle, which he repeated over and over. At the same time Sarah instructed a small group of her friends on the "correct" way to play a cabasa by demonstrating her technique of shaking and rubbing.

I called all of the children over to an area close to the musical play centre along with the help of Mrs. Pauls. Today was the first day that I had planned to work for a short time with the whole group together before they were going to go to their choice of centres. I wanted to tie in with the sea theme that they were currently engaged in and therefore I introduced the recording of *Octopus's Garden* and the story *Swimmy* by Lionni. Before we listened to the recording I asked the children what we might find in an octopus's garden. They had many interesting replies including "flowers" and "water

flowers." While we were listening to the song Matthew sang along and Michael went over to the mask box and promptly put on an octopus mask which he wore back to the music area. As I read the story I inserted a repeated singing phrase at particular points. It was, "Swimmy, Swimmy, what do you see?" and I used the melody sol-mi, sol-mi, sol-mi-re-do. Soon the children began to join me in singing as the story continued. I also played *Octopus's Garden* by the Beatles when they were going to leave the short whole group activity and go to their choice of centres. Many children enjoyed hearing the music and we saw many examples of improvised dancing.

Some children chose to work on painting and writing activities and we could hear many of them singing the "swimmy" tune to themselves as they worked on their arts and crafts project. As Justin coloured a picture of a crab he changed "swimmy" to "crabby" and sang the phrase "Crabby, Crabby, what do you see?" over and over to himself. The singing was well in tune.

Several children gravitated to the musical play centre and now that the children were more familiar with some of the instruments we saw different kinds of activities and interactions. Madison said, "That's a low A and that a high A," as she pointed to the different notes on the xylophone as Hannah watched and listened. Mrs. Pauls encouraged the children in the centre to try to sing the new "swimmy" song that they had just learned. She asked, "Can you sing the new song to me as you are playing?" The children were engaged in a variety of musical responses including running mallets up and down the instruments and playing the beat together as they performed on a variety of pitched and unpitched percussion instruments. They continuously watched each other for ideas and

cues. Daniel experimented with the xylophone and soon found the "swimmy interval" which he played over and over for himself. One child responded by singing *Twinkle, Twinkle Little Star* instead and the other children in the centre accompanied her on their instruments. Mrs. Pauls said, "I've got an idea, let's see if we can all start and end together when Chelsea sings the song." The children joined together and accompanied Chelsea's song, beginning and ending together.

Ashley and Sarah were playing sandblocks together. Ashley explained, "You have to do it like this—very softly." Mrs. Pauls noticed Daniel playing the xylophone very loudly and took the opportunity to show him how to play with more control by holding the mallets further down the shaft and that way he could also play more softly and with greater control. He experimented with different ways of holding the mallets.

At the same time that the children were at the play centres Mrs. Pauls asked them to stop for a short time and come to see the arts and crafts project that they would be working on later when they came to the table. Mrs. Pauls and Valerie, the teaching assistant, had planned to take small groups of children during the extended play time so that they could work on the projects. Mrs. Pauls explained that today they were going to place a pearl in an oyster shell that they would also be able to paint. The children were very attentive as she demonstrated what they would be doing at the tables that day. A few children were asked to come to the table and the others continued with their play.

At the music centre Olivia instructed the other children on how to play a melody on the xylophone. The research assistant called her the "xylophone leader" in her field notes. Mrs. Pauls encouraged the girls who were following Olivia and used phrases like,

"very nice," "very good," "that's a great idea!" and "sounds nice." Tyler was singing the swimmy tune and Mrs. Pauls asked him if he could play that tune on the xylophone and he began to listen to the sounds to see if he could find them. Another child played the rhythm of "swimmy" as he played his xylophone.

Samantha was interested in playing the frog guiro and she played it by striking it with a mallet. Mrs. Pauls saw her and said, "This is another way that you could do it" and demonstrated a scraping motion, which Samantha then tried. Mrs. Pauls noticed two children placing the xylophones side by side. She encouraged the children when she said, "What a good idea! What a brilliant idea! We could put them side by side!" At the same time, I was helping Hannah hold the mallets by suggesting that she hold them further down the shaft. As she played I said, "That is a great sound, isn't it!" Madison was playing the tick-tock block and remarked, "Those are different sounds." A small group of children discussed how the xylophone looked like the piano. They then moved the xylophone so that they were facing each other and claimed that one xylophone was the white keys and the other was the black keys.

Ashley asked if I would put *Octopus's Garden* on the CD player again so that she could dance. She began to dance her own improvised dance and we could see that she had taken some dance classes by the moves that she was incorporating into her own interpretive dance. Mrs. Pauls provided some pieces of crepe paper that the children could use as streamers during their dancing. One research assistant remarked that this prop was helpful in extending the children's dancing. She copied Ashley's dance and many others joined her. Ashley explained that she took "ballet and gymnastics" and this

was clearly evident as we watched her create her dance. Mrs. Pauls moved around the room calling, "Does anyone feel like dancing?" Scarves now replaced the crepe paper streamers and Mrs. Pauls provided suggestions like, "Shake this around!" and "Can you make a circle?" As more and more children entered into the dance we could see them watching each other and getting ideas for their own dances. Many copied the moves of others and we saw a wide variety of fast and slow movement sequences that included skipping, twirling, and hand motions. They watched each other closely for ideas that could be incorporated into their own dances. Ethan and Michael chose to play the xylophones while many others danced. They played the same tempo as the recorded music and it seemed that they too were a part of the dance production. At one point the children decided to make a dancing line and follow each other as they danced around the classroom. The children joyfully danced around the classroom to the sounds of the Beatles.

Vignette Three: Commentary

The children were now very familiar with the musical play environment and many spent most of their play time interacting with others at this centre. They were free to come and go and play in a variety of ways. Musical play allowed the children to take the lead in their learning and the development of their musical understanding. Through conversations they interacted with each other and asked and answered questions that were important to them. They used language as they demonstrated their understandings and also included physical gestures to assist them in their explanations (pointing to high and

low A). The children also took some of what had been introduced in the brief whole group lesson and used the music to create new lyrics and construct melodies on the Orff instruments. Children continuously used music-related vocabulary to explain and discuss the music that they were creating. They identified sounds and labeled them high and low and by their letter names. The use of language as well as gesture assisted them in making connections with that which they were teaching others or learning themselves (e. g. "You have to do it like this—very softly"). St. John (2006) points to the use of language and language exchange as having a "profound impact on scaffolding techniques" (p. 35). Bodrova and Leong (2007) regard language as a tool of the mind which children use to "help them perform a behavior and to think" (p. 65). According to Bodrova and Leong mental tools (i. e., tools of the mind) "help us attend, remember, and think better" (p. 4).

The use of materials was prominent in their play. Dramatic or make-believe play is acknowledged by Vygotsky as key in his understanding of the defining of play (Bodrova & Leong, 2007, p. 129). Many examples of pretend play were evident in this vignette. A group of children organized two xylophones to imitate a piano keyboard and pretended to be pianists as they performed on their created piano. As the children played with music they could often be heard incorporating the vocabulary that had been used by their teacher or other adults to encourage and support learning. As she instructed the other children, Olivia became the teacher in her play and used language such as "very nice," "that's a great idea," and "sounds nice" in order to encourage and support the learning of others. During their make-believe play, the children were involved in peer scaffolding as they participated in shared activity and assisted performance.

The teachers also used shared activity and assisted performance as scaffolding strategies to assist learning. They questioned children in a variety of ways. Some questions were based on the activities that were introduced in the large group and many questions were based on the actions and intentions of the children ("Can you sing the new song to me as you are playing?"). This aspect of scaffolding emphasizes the importance of the teacher as one who is knowledgeable and who can identify where the child is in the learning zone and where he/she is ready to proceed. The knowledgeable teacher is able to identify the zone of proximal development and assist (scaffold) the learner in reaching the next step in understanding. Diaz, Neal, and Amaya-Williams (1990) confirm this when they note that "the adult-child dyad engages in joint problem-solving activity, where both share knowledge and responsibility for the task" (p. 140). They also assert that the process from joint to independent problem solving "does not simply happen automatically or by chance but rather involves very specific teaching interactions on the part of the adult" (pp. 140–141). The teachers used modeling, physical gestures, and demonstrations to assist children in their musical learning. Through their physical gestures, warm relations, and encouraging language they provided a safe and supportive environment ("That is a great sound, isn't it?"). The children also incorporated these strategies as they participated in peer-scaffolding interactions.

The teachers and children together created an environment that included shared activity in which they were responsive partners in learning. Through their language and gestures the children demonstrated that they were able to teach and learn from their peers and the play environment allowed them to initiate their own learning. They could call on

teachers for assistance and guidance and teachers were able to provide support and develop understanding through challenging questions and careful observation and intervention. Vygotsky (1987) reminds us of the important role that shared activity or assisted performance plays when he says,

> what lies in the zone of proximal development at one stage is realized and moves to the level of actual development at a second. In other words, what a child is able to do in collaboration today he will be able to do independently tomorrow. (p. 211)

Vignette Four: February 12, 2007: Music, Valentines, and Love

This was the children's last school day before Valentine's Day. They began the day working together on colouring and printing activities at the two tables. Mrs. Pauls sang the directions that she wanted the children to follow. She showed a sheet that had the word LOVE printed in bold letters. She also sang the letters that spell "love" and then sang "Who can spell love?" One child *sang* back, "I can spell love." She demonstrated the painting that she wanted each of them to do that day. Ashley announced that she was going to Kelowna and Chelsea said, "I love Kelowna. They have beautiful fruit growing there." After a short time Mrs. Pauls reviewed the children's free play choices. She also took this time to demonstrate the painting activity so that they would know what to do when they eventually came to the painting centre. The children listened and watched as Mrs. Pauls demonstrated and talked about their task.

When the children began going to the play centres many chose to play with a wide variety of toys. Discussions were heard about various holidays and children also used many different kinds of voices as they participated in imaginary play with knights, a castle, and dragons. The children at the castle were engaged in a conversation about "good guys' and "bad guys." Ronnie pointed to a little doll and said, "That's their kid. In this cage is the bad guy. Two more bad guys. Here's my good guy." Each of the other boys showed his good guy. For a long time the group of boys could be heard discussing their definitions of good guys and bad guys. Nearby, at the puppet theatre, Michael played by himself with two puppets and used two different voices as he created his puppet play.

Mrs. Pauls and I encouraged the children to join me when I introduced the books *I Know an Old Lady Who Swallowed a Fly* followed by *I Know an Old Lady Who Swallowed Some Snow*. When we sang the original song, the children began to talk about many other songs that they knew such as *Old MacDonald* and *Bingo*. Two boys each called out, "I know that!" Emma said, "I saw that book in the library." As I sang the song, more and more children started joining in as they recognized the pattern. The children were singing using the light singing voice that I was modeling.

Some children chose to continue to play on their own while I introduced the books. This choice was acknowledged and respected. After introducing *I Know an Old Lady Who Swallowed Some Snow*, the children and I had a discussion about what coal was and many had very interesting explanations about what it was and what it was used for. Christopher said that it was used for a train. The children also made comments about

snow. Nathan said, "Snow tastes good." Sarah replied, "She could choke on it." The books were left for the children to look at on their own and I began to circulate around the classroom as the children were at play.

As the books were being explored, Sarah played with a mallet and a baton at the back of the class. She began singing *Bingo* and when Mrs. Pauls heard her she clapped and a few others joined the singing. Meagan was playing the alto xylophone and then she decided to go to the table on her own and look at *I Know an Old Lady Who Swallowed a Fly*. Mrs. Pauls sat at the alto xylophone and called out, "Anyone want to share with me?" and two children came and sat down with her as she played. Sarah continued to play on her own but now she was playing the metallophone and the sand blocks.

Emma and Madison had chosen to play with a toy that had a variety of animals that were supposed to make sounds when a button was pressed. The toy appeared to be broken for it didn't make any sound. I asked them if they thought that they could make the animal sounds instead but they said that they couldn't. We did have a chance to talk further about animals and the different kinds of sounds they make. I asked some questions such as, "What kind of sound does a bird make?" Emma imitated a bird. "Is it high or low?" She responded that it was high. She then announced, "I play piano lessons."

Mrs. Pauls was encouraging the children to play the xylophones as she strolled through the room. "Who will be the conductor?" she asked as she began to conduct. The children followed her conducting and then took turns being the conductor. She asked, "What does a conductor do?" Christopher answered, "Uses this stick to tell who plays."

Mrs. Pauls then asked, "Can you also tell to play fast or slow?" The child who was conducting at the time then began changing speeds and the children reacted by playing fast or slow depending upon the conductor's tempo. The children began calling out the speed "fast" and "slow." They then asked for "medium." The group of children played conductor for almost an hour and took turns being the leader. They also changed the instruments that they were using.

The children enjoyed dressing up and there were many dress-up clothes from which they could choose. Meagan chose to dress like a princess and asked Emma and Madison if they would play with her. When they refused she walked over to an ocean poster and used her princess wand to point to various fish on the poster as she practiced saying the names out loud. She eventually joined two other girls who were also dressed as princesses and together they used their wands to magically make changes to cups in the kitchen.

Sarah was not part of the conducting group. Instead she chose to play the metallophone and accompany herself as she sang, *I Know an Old Lady Who Swallowed a Fly*. She announced that she knew how to sing the song. We could also hear Daniel as he sang this song to himself. Sarah was playing the jingle bells and when Mrs. Pauls saw her playing the bells she took the opportunity to show another way of playing and said "on your hand" and tapped her hand. Sarah imitated her and now she had two ways of playing the bells.

Christopher placed the missing bars on the metallophone back on to the instrument. He then began to play the metallophone with mallets that were crossed over.

Mrs. Pauls noticed and said, "Remember last time I was showing you how to use the mallets, like your bicycle handle bars?"

Meagan was singing a song and trying to accompany herself on the Orff instrument. She had to stop playing when she was singing and the research assistant noted that she thought that Meagan was experiencing difficulty doing these two things at once; she felt this was why Meagan mostly sang. Two other girls joined Meagan and they played along while Meagan kept singing. Andrea said, "Mrs. Pauls said 'just play it'."

The research assistant noticed that when the children were playing hand drums they played with just one finger. She asked Mrs. Pauls about it and Mrs. Pauls explained that when they had their Christmas concert she asked the children to play with only one finger because she didn't want the drums to be louder than the singing. The children had not forgotten this playing technique and continued to use it during their free musical play.

Chelsea said, "That's beautiful music," when she heard Meagan still singing. Meagan continued to sing for 10 more minutes and even when she left and was walking around the classroom she continued to sing.

Children were able to go into a small tent when they were at the reading centre. The research assistant noticed that Hannah was reading *Green Eggs and Ham* with a great deal of accuracy. She assumed that Hannah had memorized the book as she practiced pointing to the words and reading from left to right. She changed books several times and still used the same techniques for following the words. She had most pages well memorized and at the end of the book she improvised the words that she could not remember accurately. Meagan was still heard singing as she continued to walk around the

classroom and the girls who were interested in the song, *I Know an Old Lady Who Swallowed a Fly,* were still involved in looking at the book together. It was time to clean up and move on to the next activities. The next day was Valentine's Day and a party was planned for that day and therefore no data was to be collected.

Vignette Four: Commentary

Warm relationships, responsiveness, and support for others were prominent in the activities related to the Valentine theme as well as the behaviours exhibited by the children during their interactions. Leper, Drake, and O'Donnell-Johnson (1997) in their study of tutors and scaffolding include "nurturance" (p. 131) as one of the characteristics associated with how they describe an "expert human tutor" (p. 131). They indicate that in their study "expert human tutors . . . display a high level of affective support and nurturance in their interactions with students" (p. 131). Their study also revealed that their best tutors "also show a high level of interest and enthusiasm for their students" (p. 132). Mrs. Pauls continually demonstrated her high level of nurturance as she interacted warmly and enthusiastically with the children on this day as well as the other days of the research. She engaged the children in conversations about the meaning of love on this pre-Valentine's day. She playfully and enthusiastically invited children to participate in musical play when she asked the children, "Who wants to be the conductor?" Her active involvement and engaging presence exuded a lively spirit of enthusiasm and warmth to which the children actively responded. She also was encouraging of the children to be

participants in make-believe play which is regarded by Vygotsky as "the leading activity of the pre-school and kindergarten period" (Bodrova & Leong, 2007, p. 129).

Mrs. Pauls incorporated an improvised song to assist the children in remembering the spelling of love. A mediator such as this is an example of a scaffold which is closely related to activities that assist in performance such as saying the names of steps to yourself while performing a dance (Bodrova & Leong, 2007, p. 21). The improvised song was used to assist the children in successfully accomplishing the spelling activity.

Discussion was always encouraged during musical play and as Chang-Wells and Wells (1993) point out,

> it is in conversational meaning-making, with the support and scaffolding provided by an adult, that the learner, through engaging in the moves of discourse is enabled to enact the mental procedures involved, even though he or she may not yet have a full understanding of the significance of the moves that are made. (p. 63)

The conversation about coal in which the children and I participated preceding their musical play time was an example of a conversation which involved a discussion about a topic of which the children did not have a full understanding and yet they engaged as if they were knowledgeable about the topic and revealed many interesting ideas through their informal conversations. In fact the children may have been engaging in a form of make-believe play in which they pretended to be experts on the discussed topic. Chang-Wells and Wells emphasize the significant place of culture and experience in the development of the child's ability to engage in dialogue when they say, "classroom

discourse is concerned with more than just the topics that make up the curriculum, viewed from a cognitive perspective. Each individual's understanding of a topic is rooted in his or her experience" (p. 64). Dialogue and communication, within a teaching/learning context where scaffolding can be effective, is described by Roehler and Cantlon (1997) as one in which "learners have opportunities to communicate their thoughts" (p. 10). On this day and others the children at Wild Rose Nursery School actively participated in conversations about topics such as coal, knights and dragons, and musical conductors. Many conversations were supported through the presentation of questions that were intended to encourage children to participate in make-believe play that was related to music vocabulary and performance techniques (e. g., What does a conductor do? Can you also tell how to play fast or slow?). The intentions of the children's were respected, honoured, and acknowledged and they were given the freedom to make decisions regarding taking on the role of conductor and creating an improvised game of tempo changes in which children responded to tempo vocabulary (e. g. fast, slow, and medium). These examples also show the children and their teacher involved in the scaffolding strategies associated with assisted performance and shared activity.

Self scaffolding as described by Meadows (1993) and Wood and Attfield (2005) was demonstrated by Meagan who, dressed in a princess costume found at the dress-up centre, practiced saying the names of fish as she pointed to the pictures on a poster. The chart was a scaffolding mediator which assisted Meagan in mastering the names of the fish. A mediator such as this would be used by teachers and children for a period of time and then abandoned once the child could identify the fish in other contexts (e. g., in an

aquarium). Her performance of the task was assisted by pretend play in which she copied the actions of the teacher and "transform[ed] them into . . . her own way of solving that particular problem or doing that particular task" (Meadows, 1993, p. 344). Vygotsky (1978) reminds us that "in play a child creates an imaginary situation" (p. 93). Here, Meagan was seen imitating many of the teaching strategies that she had observed being performed by her teacher and other adults. Through pretend play she used private speech in conjunction with make believe play as self-scaffolding strategies. Meagan also showed her developing expertise and as Wood and Attfield (2005) assert, "they become more capable of assisting their own performance" (p. 106). All of this was achieved within the context of make-believe and musical play.

Mrs. Pauls observed Sarah as she explored the jingle bells during musical play. As she observed the child playing with the jingle bells and using them in one way (shaking the bells), Mrs. Pauls visited with Sarah and showed her an additional way in which she could play the bells. Mrs. Pauls used this unplanned opportunity to intentionally assist Sarah. She was able to perceive the developmental level of the child and perceive the intentions of the child in order to scaffold Sarah's ability to play the jingle bells in a number of different ways. de Vries (2005) indicates that the teacher's ability to perceive the child's developmental level in conjunction with the ability to perceive the intentions of the child are both paramount in scaffolding. Mrs. Pauls' demonstration was a clear example of a scaffolding technique that would assist the child in expanding her understanding of performance possibilities. When Mrs. Pauls left Sarah she happily continued her play and alternated her bell performance with shaking and

striking against her wrist. Demonstration is acknowledged as one way in which teachers can scaffold learning. Roehler and Cantlon (1997) explain modeling of desired behaviours as one way in which scaffolding is achieved. They describe this as "*performance modeling* [emphasis in original] [where] the learners were simply shown how to carry out a task" (p. 20).

Following Mrs. Pauls' questions related to the role of the conductor and the discussion of words related to tempo, the children played their own conducting game. They initiated self-created problems/challenges by spontaneously calling out various tempi to which the child conductor physically responded. Their self-created problem became part of the musical play and through this self-initiated activity they practiced responding to tempi-related vocabulary while at the same time demonstrating their understanding of this musical vocabulary. Mrs. Pauls' questions and interactions at the beginning of their play provided what Wood and Attfield (2005) describe as an "*enabling scaffold*" [emphasis in original] (p. 95) which "led towards a higher level of performance" (p. 95). In response to the enabling scaffold, the children were motivated by their own intentions and participated in "*sustained shared thinking*" [emphasis in original] which Wood and Attfield (2005, p. 106) describe as important to the supportive interactions between learners and teachers.

Wood and Attfield (2005) further describe the results of the enabling scaffold in their discussion of the development of children's experience and expertise. They indicate the development of children's "*metacognitive skills and strategies* [emphasis in original] . . . as enabling them to make choices and decisions, exercise conscious control and

awareness of their activities [where they] set challenges for themselves and each other, and test their own skills, strength and competences" (p. 106).

On this pre-Valentine day at the Wild Rose Nursery School, scaffolding was evident in the children's pretend play and musical play interactions. Scaffolding was evidenced in many of the ways that are described in the related literature such as warm relationships, playful engaging behaviours, dialogues and conversation, demonstration and modeling, and exploration of self-initiated and self-created problems and challenges. Scaffolding occurred as the children were involved in private speech, shared activity, and assisted performance with adults and peers.

Vignette Five: February 16, 2007: Musical Dinosaurs

I often began the musical play-time with a story, a song, or a short discussion. The children were especially interested in the book *The Drumheller Dinosaur Dance*. On the day that I first presented this book I also had a variety of instruments set up in the musical play area. These included soprano xylophones, alto xylophones, and an assortment of unpitched percussion instruments. The children gathered round as I read the story and together we repeated the recurring phrase from the book: "boomity-boom, rattely-clack, thumpety thump, whickety whack." The children enthusiastically patted the beat as they repeated the chorus. Jordan declared, "They like the sound of it!" I asked them if they wanted to try to make their sounds go from low to high as they were chanting the phrase. They all responded with an enthusiastic, "Yes!" We practiced the phrase together and

then added our crescendoing chorus to the telling of the story. Many children insisted that I read the story a second time and as I repeated it, they listened intently.

Following the second reading of the story several of the children made their way to a variety of play centres. Jordan and David discovered a container filled with plastic dinosaurs and as they began their play they discussed the sounds that dinosaurs make. Jordan said, "Dinosaurs don't make any sounds when they are asleep." David replied with his own ideas, "I wonder if those dinosaurs are making any sounds?" Mrs. Pauls overheard their conversation and added another question, "Do you think that there are any dinosaurs that make songs?" The conversation continued and then Jordan tapped a rhythm and said, "It's called the dinosaur crack. We are going to get all the dinosaurs out and get them to sing!" At this point he thumped two dinosaurs on the ground and performed a syncopated rhythm using the dinosaurs as his instruments. The dinosaurs rose up and down to Jordan's high and low improvised sounds. "Is the moon coming up and going down in the night time?" asked Mrs. Pauls. David made a "wooo" sound as he made a downward motion, which Mrs. Pauls mirrored with larger movements. Jordan and David continued their dinosaur play with sounds that they imagined that the dinosaurs might make.

A group of children was very interested in dramatizing the sequence of events in the book. They also discussed many ideas for adding different sounds and what those sounds were going to represent. At one point during their discussion Mrs. Pauls passed by and asked the children if they had ever thought about using some of the other instruments that were on the shelves. She provided some examples and demonstrated how they could

be played. The children listened and watched and then decided to include some of her suggestions in their dinosaur production. She asked if they could do a "boomity-boom." One of the research assistants remarked that this question "lead (*sic*) to a search for how to play the rhythms in the book." Danielle said, "Maybe dinosaurs could rise up as they hear this sound," as she played on the hanging cymbal. Janine joined in with a triangle and she was encouraged by Mrs. Pauls' remark, "That would be a good sound too!" The children decided that the drum signified time for sleep, sand blocks were the rain, and the triangle represented snow.

The beginning of the hour long improvised production began with the declaration, "It's wake-up time!" This signified the start and all of the children acknowledged this beginning call. Many children were playing instruments together to a unified beat and children, like Amy, who was busy with other activities, jumped up and went to join the dinosaur extravaganza. The dinosaur wake-up sounds were played loudly and vigourously by the children and they used many contrasting unpitched percussion instruments. Even though the xylophones were available they seemed to feel that unpitched percussion sounds suited their wake-up call. At the same time they also decided that dinosaurs should "go to sleep" and together they seemed to instinctively decide that it was time for dinosaurs to go to sleep and then their music would immediately change to sounds that were much quieter and sometimes there was complete silence from the group.

Mrs. Pauls was watching and listening to the dinosaur production as it began to unfold. She waited for a quiet moment and began to sing a short, improvised dinosaur

song, "millions and millions of years ago," she sang as she accompanied herself on the hand drum. This was followed with an invitation for the children to join her in her singing as she placed a dinosaur picture book on the table. At this point Monica exclaimed, "Oh, good idea!" and began to sing and play the maracas. Mrs. Pauls then used a sandblock as a baton and began to conduct the improvisation and with a reminder, "Watch the conductor!"

The children chose many different instruments and Ronnie assigned himself the role of conductor. At first he told the children when to play by saying, "All together now. The sun is coming up." At this point everyone was quiet and then when he shouted, "Wake-up, moon is out!" the dinosaurs came to life. Together the children discussed the best way to signify the coming out of the moon and they all agreed that the cymbal should provide the signal. They had a discussion about the best way to play the cymbal and discovered that they could play cymbals by crashing them together or by playing one cymbal with a mallet. The cymbal could also be played by holding it upside down and striking it with a mallet.

A new conductor emerged and by either saying, "Altogether" or "Stop" the children knew when to start and stop the music. The children listened attentively and stopped upon the signal. This second conductor, Andrea, began to conduct a beat with her stick baton and the other children followed her beat by playing together on their own instruments. Mrs. Pauls congratulated Angie on the "great dinosaur sound" that she made with the frog shaped guiro. Matthew called to a friend and encouraged him to join in by saying, "Hey Jamie, we are doing a dinosaur band!" Jamie came over and helped Angie

play her frog guiro and said, "Let me show you where the stick goes." Many other children took their turns at being the conductor and this play continued for as long as different children wanted to take on the leadership role.

After many others had taken their turns, Ronnie returned to the position of conductor and yelled, "Wake up!" His call was followed by Jamie's singing, "Wake up! Wake up" with a clear sol-mi melody. "Wake up! Wake up! Everybody everywhere" was sung with a clear high voice by Daniel and this was followed with a clear "doo, doo, doo, doo" again with a clear high sound. Emma, who was not participating in the dinosaur musical play, watched from the side and carefully noted what the children were doing. As she watched she began to imitate the beat that the group of children was playing. All the while Jamie sang, "Dinosaur band, dinosaur band" on sol-sol-mi-re. Many children began to use the plastic dinosaurs along with their instruments and Jarrod was heard singing, "Try to catch me, try to catch me" with a repeated sol-mi motif as his melody. I brought over a soprano xylophone and played a sol-mi melody on the instrument in response to the singing. The children, however, were not interested in changing their singing play. They matched the pitches of the instrument that were played but did not show any interest in using this instrument themselves.

As the improvisation came to end, Ryan played a drum and shouted, "Thunder!" This signaled the end of the improvisation. The dinosaur improvisation was complete!

Vignette Five: Commentary

In the development of children's cognition Vygotsky (1978) indicates that "every function in the child's cultural development appears twice: first on the social level, and later, on the individual level; first between people (interpsychological) and then inside the child (intrapsychological)" (p. 57). The development of musical understanding that occurred on this day provided a vivid example of the children's interpsychological interactions. The children worked together socially interacting with and responding to each other as they musically revisited and interpreted the dinosaur book through dramatization, conversation, vocalization, movement, and improvisation.

Morin (2001) indicates that within a musical play environment, the teacher is "one who prepares the environment for musical play, designs the invitations for children, initiates, responds, encourages, and converses, but does not direct the experience" (p. 26). We are also reminded that, according to Bodrova and Leong (2007), the organization of the learning context is also considered to be a form of assisted performance. The book and our initial group interactions provided the context for the development of the musical play episodes. de Vries (2005), in his study of scaffolding and song acquisition, describes his introduction of nursery songs such as *Twinkle, Twinkle Little Star* as providing the scaffold from which he modeled and participated socially with his son. In the case of this study's nursery school children, the story initiated the shared activities and propelled the children and teachers into a variety of scaffolding interactions that contributed to the development of their musical understanding. The children had their own ways of

participating in, reacting to, and thinking about the experience. They interacted both interpsychologically and intrapsychologically.

Social interaction and problem solving were prevalent during the morning of the musical dinosaur experience. Wood (1989) describes scaffolding or

> scaffolding functions [as] . . . activating problem solving in the child. By helping children to attain goals that they can recognize but not initially achieve, instruction enables novices to reach higher levels of competence than they can achieve alone. (p. 60)

Mrs. Pauls suggested materials (musical instruments) that could be used to perform the rhythm of the book's repeated chorus and she followed this with a brief demonstration of playing techniques. Her suggestions and demonstration scaffolded the children as together they explored the music and created their own musical interpretation of the dinosaur tale. They responded to questions and provided individual suggestions for performing. The research assistant noted that Mrs. Pauls' questions "led to a search for how to play the rhythms in the book" (from field notes).

Wood (1989), in his discussion of the relationship of modeling and imitation to scaffolding, indicates that, according to his research, modeling and imitation "are not sufficiently rich to provide adequate tools for understanding the ways in which children, through social interactions with and observations of the more mature, become knowledgeable members of their culture" (p. 71). During the dinosaur musical vignette, modeling played a part in the scaffolding process in harmony with other scaffolding procedures such as encouraging remarks, gestures, and demonstrations. The children also

used the modeling to assist them in the development of their musical understanding, which was evidenced in their distinctive, musical interpretation of the book. Vygotsky's (1978) notion of shared activity being central to the construction of meaning (Bodrova & Leong, 2007) was apparent as the children interpreted the story of the *Drumheller Dinosaur Dance* through music, speech, and movement.

Dalton and Tharp (2002) note the dominance of whole-class instruction as a pedagogical strategy predominately used in the world's industrialized countries. According to related literature in music education this practice is also confirmed in early childhood music classrooms (Morin, 2001; Smith, 2005; Smithrim, 1997). In contrast to the practice of whole-class instruction, Dalton and Tharp (2002) point to the emergence of knowledge "through social and cultural activity during community participation" (p. 181) as a positive and progressive alternative. They confirm that, "When experts and novices work together for a common product or goal and have opportunities to converse about the activity, learning is a likely outcome" (p. 183).

The musical play environment provided opportunities for the active social and cultural involvement of which Dalton and Tharp (2002) speak. The children had opportunities to initiate, question, and participate in activities that contributed to their musical growth. Through shared activities and assisted performance, the children who chose to engage in the dinosaur musical play were able "to perform at a level higher than would be possible alone" (Dalton & Tharp, p. 181). As the children engaged in pretend play during their musical play they discussed possibilities and made musical decisions (e. g., "maybe dinosaurs could rise up when they hear this sound" i.e., cymbal), they assisted

each other in achieving their self-initiated goals (guidance they provided each other when playing instruments), and took on positive leadership roles that would propel the performance to its concluding sound (role of the conductors). The children became the dinosaurs, the musicians, the dancers, and the conductor during this episode of pretend play.

Summary of the Commentaries

Phase One of this research provided the opportunity to observe the musical play of all of the children in the class and address both research questions. Evidence of scaffolding interactions between teachers and peers began to emerge as the study progressed. It was interesting to note that at the beginning of the study the children engaged in musical play much differently than they did as the study progressed. As they became more familiar with the materials, the context, the opportunities, and the invitations their level of play appeared to become more sophisticated and their involvement with music more refined. They also enjoyed spending extended periods of time participating in musical play. The following overview provides a summary of the findings during Phase One of the study.

It was evident that language was a very important part of the scaffolding that took place during musical play. When the study began the children demonstrated that because of the climate that had been established in the nursery school, they were very familiar with participating in discussions, conversations, and dialogues. The children were respectful of each other and listened as each child contributed to conversations at the

level at which they felt comfortable. According to Vygotsky (1978) children engage in two different kinds of speech—public and private. The children in this study engaged in both types of speech during their musical play. Private speech was often observed being utilized as a self-scaffolding strategy. Children such as Evan used private speech to practice beginning sounds with pictures as he participated in his chosen self-scaffolding activity. Public speech occurred regularly as children interacted with each other and with their teacher during musical play. The public speech made it possible for the children who were involved in the dinosaur vignette to communicate their intentions and contribute their ideas to the group as together they created the dinosaur composition. When the dinosaur musical play was initiated by Ronnie, the children participated much like Gadamer (1989) described, in a "to-and-fro movement [with the movement having] no goal that brings it to an end; rather renew[ing] itself in constant repetition" (p. 103).

The intentions of the children were honoured as they participated in musical play and this characteristic also contributed significantly to the scaffolding. In combination with the honouring of intentions was the ability of the teacher to recognize the zone of proximal development and respond to the children within their individual zones. It was during these times that the sensitivity of the teacher was a key factor in supporting and extending the learning of the children. Careful listening and observing by the teacher assisted her in scaffolding the children's learning. Incidents that involved modeling, encouraging remarks, physical gestures, use of language, and questioning were all part of the scaffolding behaviours used by both the teacher and the children as they scaffolded others and in some cases themselves. Within the Vygotskian framework these scaffolding

strategies could be included under two umbrellas: assisted performance and shared activity.

Incidents of pretend play increased during the period of research and this allowed the research team and the teacher to recognize, acknowledge, and respond to the children's zones of proximal development. It was within these zones that scaffolding could take place and strategies that were used predominately could be categorized as shared activity and assisted performance.

CHAPTER FIVE:

DATA ANALYSIS: PHASE TWO

Introduction

This chapter addresses Phase Two of the research and is comprised of vignettes which focus upon three children who were identified as those who stood out because of their interest in developing their musical understanding during times of musical play. The children, through their rich, focused interactions with their peers, their teacher, and the members of the research team, clearly stood out amongst the others as examples of children who were especially interested in music and who grew in their musical understanding as a result of playful interactions and incidents of scaffolding. The three children frequently demonstrated continuity in their play in that they chose the same or similar play materials from one day to the next and focused their attention and practice on recurring music skills, concepts, and ideas. For this reason, the vignettes often span a period of several days. The reader has an opportunity to capture the child's development of musical skills and recognize the many incidents of scaffolding that occurred during musical play over time.

The three children—Hannah, Chelsea, and Ronnie—were very different in their nature and came from varying backgrounds but they all demonstrated an affinity for developing their understanding of music through musical play. Hannah was kind, caring, independent, and helpful. Her fascination with melody was evidenced through her ongoing interest and involvement in the construction of melodic patterns on a variety of instruments. Chelsea was quiet and reserved; she enjoyed participating with other

children and used much of what she observed in others to extend her own musical understanding. Ronnie was energetic, active, and animated. At first glance he did not appear to be a child who was truly interested in music but through careful and continuous observations and interactions it became evident that music was a significant part of his play and eventually, through musical play, he found his singing voice.

Vignette One: Hannah's Lullaby

Four-year-old Hannah was the oldest child in her family. She had one brother who, because of health issues, required a great deal of her parent's time and energy. Her father worked as a physician on assignment in the Middle East and her mother did not work out of the home; rather, she stayed at home where she cared for both children. Hannah's parents were from differing ethnic backgrounds and were very interested in the education of their daughter. She was attending Wild Rose Nursery School for the second year and showed much interest in music. When I first arrived at the nursery school Hannah's mother told me of her desire to enroll Hannah in piano lessons.

During the playtime Hannah often gravitated to the music area as well as the painting and writing centres. On my first day of observation Hannah had shown considerable interest in printing words and she assisted her friends at the printing centre by providing instructions, "You have to write octopus. I know that you have to start with o." She often took pleasure in explaining her learning process to the other children. She clearly expressed her opinions and was firm in what she believed, "I have three diff

colours. I like green, blue, and yellow," she explained when Mrs. Pauls observed that she had used a lot of green and yellow in a painting project.

She enjoyed playing in the musical play area and experimented with many of the available instruments. On one of the first musical play days Hannah organized a group of instruments for herself: a soprano xylophone, a frog guiro, a woodblock, and a drum. She held a mallet by its head and played a sequence that followed a specific order: xylophone, guiro, woodblock, and drum. We heard her play the following rhythm pattern twice on each instrument: ta, ta, ti-ti, ta. She happily welcomed Olivia who stopped by briefly to add the jingle bells to the musical sequence.

She often thoughtfully and quietly watched and listened to other children as they participated in musical play. When Madison pointed to different "A"s on a xylophone Hannah listened attentively to the explanation, "That's a low A and that's a high A." She was accepting of teacher assistance and welcomed my help when I encouraged her to hold the mallets further down on the shaft as she struggled to manipulate them while she played the xylophone. She and Chelsea placed their xylophones side by side one day as they played together. Mrs. Pauls praised them for their idea of playing the xylophones together in this way and she exclaimed, "What a good idea! What a brilliant idea! We could put them side by side!" I, too, praised the girls for their playing and remarked, "That is a great sound, isn't it?"

Hannah was very sensitive to many sounds and during the unit based on the sea and sea creatures she loved to go to the table on which many shells had been placed and

listen to the sound that she heard when she placed the shell on her ear. She remarked, "I can hear the ocean."

The musical playtime often included a group activity that was related to the school's theme prior to the students' involvement in musical play. The children had been listening to the story *Mortimer* and then responded to the story by singing Mortimer's song and described the movement up and down the stairs with their ascending and descending voices. On this day the children were free to make choices of the activities in which they wanted to participate following the reading of the story. Many children chose to play a variety of different instruments. Mrs. Pauls also went to the musical play area and selected a xylophone on which to play. Hannah and Olivia decided to join her. Mrs. Pauls showed them a mallet and said that it was "for the wooden instrument" and pointed to the xylophone. Neither child was interested in this information or in playing this instrument. Instead, Hannah and Olivia chose to play on a variety of other instruments for a short period of time before they left to explore another area of the classroom.

On that day Mrs. Pauls had brought an instrument which proved to be very appealing to many of the children. The carousel bells were made up of a series of brightly coloured bells mounted on a single shaft that could be played all together when they were twirled or the bells could be played individually. They produced identifiable pitches and the children enjoyed experimenting with the various ways in which sounds could be produced.

A few days after the bells had been initially introduced, Hannah, Olivia, and Madison took turns playing the bells and they helped each other by spinning the bells as

the others played. Olivia and Madison played the bells for a while and when they decided to leave, Meagan joined Hannah. Meagan sang while Hannah spun and played the bells.

The next day the whole class gathered together and we sang *Baby Beluga*. I used the book as a pictorial guide for the children and we followed the book as we sang together. Meagan began to perform her own ostinato pattern consisting of pat, clap, snap, snap to accompany the song. Many children joined her as she continued her own ostinato. When the song was completed we all looked at how she performed her pattern and she demonstrated her snapping. Hannah enjoyed singing with the group and wanted to demonstrate her singing to the class. She sang with a clear, confident voice that was well in tune. We followed the *Baby Beluga* song with a story which Mrs. Pauls had requested I read to the children. It was called *Little Clam* and this provided an opportunity for me to introduce a discussion about loud and soft sounds which the children eventually turned into a discussion about lullabies. The children had previously discussed lullabies with Mrs. Pauls and therefore they had a clear sense of what a lullaby was and how it should be sung. Earlier in the school year she had also introduced the theme of the well-known *Brahms' Lullaby* by singing it with some of her own words. I made up a tune for Little Clam's lullaby using a sol-mi-la tone set for the melody. The children joined in when they could and for the most part the children were singing very well, using light, quiet voices that were in tune.

We looked at the ocean drum at the end of our group time and the children were anxious to share their observations and made many comments about the drum. They could see into the drum by looking at it from the bottom and remarked that "it looked like

the sea and the land." They asked many questions about what was inside the drum and wondered how the drum was made. Together we discussed their observations and questions.

The children moved to various centres and Hannah played for a long time on the xylophones, metallophone, and tone bars. On the music mat where many of the instruments were placed, Mrs. Pauls played with the children and sang part of our improvised *Little Clam* song. The interval that she sang was the same as the beginning interval of *Brahms' Lullaby*. Hannah joined her in singing and experimented with sounds on the xylophone. She tried to match her singing sounds with sounds that she was playing on the instrument. I worked with her as we tried several sounds, searching for the sounds that would match her singing. She would play two sounds, carefully listen to them, and then together we would decide whether or not the played interval was the same as her singing interval. She worked diligently at this for a long time and then suddenly she exclaimed, "It's these sounds!" She continued to experiment with other sounds to confirm what she thought was the correct interval. She would say, "Not this. Not this. This sound!" as she played, listened, and decided. She tried all of the barred instruments and identified the interval that she was searching for. She kept experimenting until she found the sounds that matched what she was singing. She used her ears to help her decide. Christopher came over to see what she was doing and when he saw her find the interval on a few instruments he said, "It's easy! We can use the letters on the bars to help us find the sounds." Hannah had found her sounds and happily played the beginning interval of her favourite lullaby.

The next day Hannah went straight to the musical play area and began to look for her *Brahms' Lullaby* interval. She said to Mrs. Pauls, who was also at the centre, "I want to find the rest." Mrs. Pauls looked confused and said, "What do you mean, the rest?" Hannah said, "You know, the rest of the *Go to Sleep* lullaby." She showed Mrs. Pauls that she could play the first two sounds and that now she wanted to be able to play the rest of the melody on the Orff instruments. Mrs. Pauls felt like she had a challenge on her hands since she had not played it herself—she had only sung it with the children. However, she did not dismiss the request. Instead, she agreed to assist Hannah in figuring out the rest of the first phrase. At first they worked on the xylophone and Mrs. Pauls was having some difficulty so she said to Hannah, "Why don't we go over to the piano and see if we can figure it out there first and then we will go back to the xylophone." Hannah agreed that Mrs. Pauls had a good idea and they went over to the piano together. They tried to figure out the melody at the piano by singing the tune and playing a bit at a time. Eventually they knew that they had figured out the first phrase and went back to the xylophone where they found the same melody.

Once Hannah had played it independently a few times she wanted to practice it over and over and she did this until she could easily play the first phrase with complete rhythmic and melodic accuracy. She then tried successfully to play the phrase on other Orff instruments in the musical play area. Sarah came along and said that she wanted to do it too but gave up after a short time and went to look for another instrument to play.

Commentary

This vignette introduces Hannah and the many interactions that she had with music and with others in the class. She often used that which she had learned in other settings and at other times to influence her musical play choices. This was evident when her involvement in the group conversation regarding loud sounds, soft sounds, and lullabies, prompted her to recall a previously learned lullaby based on Brahms' well-known *Lullaby*. The story and discussion of *Little Clam* provided the opportunity for shared activity. Researchers such as Wood and Attfield (2005) remind us that teacher interactions and motivational strategies are important aspects of scaffolding and Roehler and Cantlon (1997) indicate that "scaffolding . . . best occurs in learning situations where the learners have opportunities to communicate their thoughts" (p. 10). The discussion that followed the reading of the story and Mrs. Pauls' singing of our improvised *Little Clam* song are both examples of productive teacher interactions, motivational strategies, and communication opportunities which Wood and Attfield (2005) describe as *joint activity* [emphasis in original] which take place in the zone of proximal development, "the common ground where the learner is, and where he or she might usefully go next" (Wood & Attfield, 2005, p. 96). They also maintain that the zone of proximal development "provides a foundation for *joint activity*" [emphasis in original] (p. 96). Joint or shared activity was prominent in this portion of the vignette as teachers and children interacted through discussion.

Hannah exhibited self scaffolding strategies as she used a trial and error technique for discovering the beginning interval for *Brahms' Lullaby* on the Orff instrument. She

was persistent in her quest to find the sound and as Meadows (1993) pointed out self-scaffolding strategies are techniques which have been "so well internalized [that they can be applied in] new learning situations" (p. 344). Hannah took responsibility for her own learning and initiated that which she wanted to pursue within the context of musical play.

Christopher, in his brief encounter with Hannah, provided a moment of peer-scaffolding when he told her how to easily find the interval on different instruments. Through their discussion he provided a scaffold that would assist her in quickly locating the interval ("We can use the letters on the bars to help us find the sounds"). Christopher's explanation clearly provided Hannah with an "*enabling scaffold*" [emphasis in original] (Wood & Attfield, 2005, p. 95) when he entered into Hannah's musical play. This provides an example of assisted performance as described by Bodrova and Leong (2007).

Hannah was very interested in continuing to construct the melody. The following day saw her challenge Mrs. Pauls to assist her in the discovery and construction of the rest of the melody. This incident was a very clear example of co-construction of knowledge. Mrs. Pauls honoured the intentions of the child and modeled a way of solving a problem. Together, they experimented, discussed, questioned, planned, used a variety of available materials and equipment, and finally constructed the melody together. Trudge and Rogoff (1989) maintain that "shared thinking involving coordination of joint activity [is] central to the benefits of social interaction" (p. 17). Rogoff (2003) emphasizes the importance of social interactions in learning when she says:

> through engaging with others in complex thinking that makes use of cultural tools of thought, children become able to carry out such thinking independently, transforming the cultural tools of thought to their own purposes. Interactions in the zone of proximal development allow children to participate in activities that would be impossible for them alone, using cultural tools that themselves must be adapted to the specific activity at hand. (pp. 50–51)

Mrs. Pauls continually provided an environment that was warm and responsive which Berk and Winsler (1995) describe as a characteristic of scaffolding. Bodrova and Leong (2007) discuss the role of the teacher during play and stress the importance of careful interaction on the part of the teacher. They emphasize that the teacher has a significant role during play and that "sensitive teachers who provide appropriate scaffolding have a positive impact on the level of play in their classrooms" (p. 146). They maintain that interventions such as the following: providing sufficient time, provision of ideas to extend and enrich play, choosing appropriate materials, monitoring progress, coaching individuals, suggesting and modeling, and encouraging all assist and support children in their learning during play. Mrs. Pauls and I included many of these interventions as we interacted with the children during musical play.

Vignette Two: Chelsea and Hannah

Hannah was interested in sharing her lullaby with other children. She and Chelsea enjoyed playing with each other and Chelsea was curious about what Hannah had been doing on the last school day. Chelsea was quiet and shy in comparison to Hannah's quiet

self-assured nature. Chelsea had watched Hannah as she worked at finding her lullaby melody on the previous school day. Today the two girls worked together on the xylophone and played the melody together. As Chelsea began to go through the process of figuring out the tune, Mrs. Pauls and Hannah together coached her. Hannah looked at Chelsea and encouraged her through smiling and pointing to the correct bars. After Chelsea tried playing the tune a number of times she became increasingly successful as she practiced. She and Hannah then decided to play the melody together, each playing alternating sounds. Together the girls played back and forth sharing the song and playing alternating notes with correct rhythm and melody!

The next day Hannah once again took the lead as she played her lullaby on the carousel bells. This instrument was more challenging for the bells twirled and therefore the notes were not always located in the same place. However, they were also coloured which may have assisted her in finding the melody. Chelsea was very keen to learn to do this as well and she watched and listened closely as Hannah played. Hannah said, "Listen, I'll show you. Watch!" Chelsea attentively watched and listened as Hannah demonstrated. Hannah then said, "Watch," and she demonstrated again. She also showed Chelsea a technique for listening to each interval by playing a sequence of the first note followed by the second, the first note followed by the third and so on. Chelsea continued to watch and when Hannah decided to leave, Chelsea quietly took the carousel bells and held them close to her and practiced by herself. She worked diligently and practiced the phrase until she could play it accurately.

During the music play-time much was always going on. While many children played and danced and sang, others chose to play with puppets at the puppet theatre or play in the kitchen. Hannah's lullaby sounds could often be heard over the sounds of the children's play. She enjoyed playing her tune on the carousel bells. One day Mrs. Pauls was sitting on the floor near Hannah. As she sat with Hannah she sang the words of the lullaby song and moved a mallet to the rhythm of the tune as she sang. Together, Mrs. Pauls and Hannah dissected the melody and listened to each other as they reconstructed the tune. Mrs. Pauls then tried to play the tune on the carousel bells. Her first attempt to play the initial interval was unsuccessful. Hannah then took the lead and played the entire melody for her again. Mrs. Pauls said, "Good!" Facing each other, they continued to construct the melody together. Mrs. Pauls checked with Hannah about the process that she used to successfully figure out and perform the melody.

Hannah continued her play on the carousel bells. She decided to change songs and said that now she wanted to figure out *Jingle Bells* and Mrs. Pauls watched. The rhythm of the song was correct on her first attempt but she knew that the melody did not sound right. She tried again and played the first part of the melody correctly but still had a few mistakes in the latter part of the song. On her next attempt Mrs. Pauls pointed to the correct bells in rhythm as Hannah played. Just as she completed her first successful attempt Sam came over to see what was going on. He had been watching from the side and was curious. Instead of asking to try he simply came over and tried to take over. Mrs. Pauls said, "Just a minute lovey, we're trying to figure something out here." He waited as Mrs. Pauls had her turn at playing *Jingle Bells* on the carousel bell. As she experimented

with the bells and attempted to figure out the melody, Hannah watched. Mrs. Pauls played the melody and showed Hannah how to play it by singing the colours in rhythm as she played. Sam decided to go to the xylophone and independently he also played *Jingle Bells* on the instrument that he had chosen. Hannah was still interested in working on her *Jingle Bells* performance and Mrs. Pauls rhythmically pointed to the correct bells when she was having any difficulties.

As I walked by, Hannah asked me if she could show me her lullaby. She turned to the carousel bells and accurately and confidently played the first phrase of *Brahms' Lullaby*. Then she began to play *Jingle Bells*. I asked her if she thought we should try writing the notes for Jingle Bells and she agreed that we should try. I found a felt staff and notes that I had included as one of the materials in the musical play area. While I began to arrange the notes on the staff Hannah started to mouth the words of the song in rhythm. Together we constructed the melody and I asked questions such as, "Is the next note lower or higher?" When Chelsea joined us, she watched for a while and then decided that she also wanted to add some notes to our composition. We constructed the first phrase and then Hannah said, "Now let's see," as she pointed to the melody and checked what was written with what she was singing. She sang, pointed to the melody, and checked what was written and then checked again. She said, "Let's all do it together now!" and as she sang she followed the melodic line with her mallet. After this, all three of us sang together while Hannah pointed to the melody that we had constructed together.

Hannah decided that she wanted to play her lullaby again. She played it on the carousel bells while Chelsea watched. Chelsea said, "I can do that!" and Hannah happily

gave her the mallets so that she could try. As she made her first attempt, Hannah watched intently. When Chelsea struggled Hannah immediately began to point in rhythm to the correct bells, just as she had seen Mrs. Pauls do for her. Chelsea continued to work at playing *Brahms' Lullaby* while Hannah and I constructed the melody for *Jingle Bells* on the felt staff. Hannah said, "Let's start here," and she pointed to the line on the staff from which she wanted to start the melody. We worked for a short time on our melody and then suddenly both Hannah and Chelsea decided to twirl the carousel bells and listen to the sound they could make by holding the mallet in one place while the bells twirled. Hannah now suggested that we construct *Brahms' Lullaby* this time and together we figured out what the melody would look like as we sang and placed the notes on the staff.

Chelsea took this opportunity to play the carousel bells by herself. Once she had some time on her own to practice the piece I asked, "Can you play it for us?" Chelsea began to play *Brahms' Lullaby* and Hannah sang along and pointed to the bells. I could see the two girls looking back and forth at each other and when they had completed their performance they smiled at one another. Hannah was still very interested in continuing with the music reading and playing and decided to use a triangle beater to rhythmically point to the melodic contour. I looked at Chelsea and asked, "Can you play it and we'll sing?" Meagan came over and joined us and decided that she would like to point to the melody while Chelsea played and Hannah sang. The girls went back and forth changing their roles of player, pointer (conductor), and singer. They all watched each other as they sang, "Go to sleep, go to sleep, go to sleep little baby." It was now my turn to point to the melody but Chelsea reminded us that she had not yet had a turn to point. I asked her if

she wanted a turn and indeed she did. Hannah and Meagan passed the mallet to Chelsea who pointed to the melody as Hannah now played. Afterwards she returned the mallet to me and asked me to point while they continued their performance. Together the girls continued to look, listen, and check their notation and listen to the sounds of bells and their singing.

Commentary

As music was explored through play, Hannah and Chelsea had many encounters together. Mrs. Pauls and I were sometimes involved but in many of the incidents that occurred on this day, the girls interacted only with each other. Shared activity and assisted performance were very evident as the two girls worked toward constructing and playing the *Brahms' Lullaby* melody. According to Greenfield (1984)

> Scaffolding is . . . related to the concept of cooperation. It can be conceived as an asymmetric type of cooperation where one person takes greater responsibility than the other for successful accomplishment of a task by compensating for the other person's weaknesses. (p. 137)

Hannah and Chelsea were clear examples of children who were in cooperation with one another and Hannah proved to be the child who took more responsibility for the successful accomplishment of their self-initiated task by smiling and pointing to the correct notes as Chelsea attempted to perform the melody. Hannah, in this case, was the more knowledgeable peer or the expert and according to Wood and Attfield (2005), "within the ZPD the novice and expert take different levels of responsibility. Learning

takes place when the novice is enabled gradually to take over responsibility until mastery of the new role, skill, or concept is achieved and internalized" (p. 97). St. John (2006) maintains that "Through collaborative efforts, members [of a community] discover a sense of belonging, they participate in each other's growth, and they are empowered as they co-construct knowledge" (pp. 328–239). She also emphasizes the importance of the influence of collective music making experiences to the individual experience and acknowledges this collective music making as providing "a relational context, inviting engagement and incorporating contributions. [She further explains that] scaffolding is one such form of interaction in the learning community" (p. 241). Siegler (1996) points out that,

> Scaffolding occurs in the context of parents helping their children, teachers helping their students, coaches helping their players, and more advanced learners helping less advanced ones. The goal of such interactions is for the less knowledgeable learner to construct strategies that the more advanced one already possesses. (p. 210)

He also points out that "peer collaboration . . . often enhances problem solving and reasoning" (p. 210). We also notice evidence of what Seigler (1996) may classify as peer collaboration and cooperation during the construction of the *Jingle Bells* melody followed by the singing and bell playing. Researchers such as Bodrova and Leong (2007) may argue that collaboration and/or cooperation do not have the same connotations related to scaffolding that the terms shared activity and assisted performance hold. One might ask if individuals could be in collaboration with each other but not supporting each

other in learning. Shared activity, on the other hand "is a means of providing the assistance that children need at the higher levels of the ZPD" (Bodrova & Leong, p. 79) and there is an emphasis on the word assistance as "an essential part of the definition of the zone of proximal development" (p. 79). The terms, assisted performance and shared activity, are more appropriately applied when discussing scaffolding within a Vygotskian framework.

Later in the vignette three girls (Chelsea, Hannah, and Meagan) participated with each other as they took turns pointing, singing, and playing the melody. They assisted each other during their shared activity. They scaffolded each other through physical gestures of pointing to the notation as others performed. They engaged in make believe play as they took turns being the singer, the conductor, and the player which, in turn, assisted them in developing an understanding of the many aspects of being a performer.

St. John (2006) categorizes scaffolding strategies in the following way: personal strategies, material strategies, and social strategies. Chelsea used her personal strategy of observation many times during the course of the research. Observation of others was a strategy that she used to ensure her success when she took on the task independently. Today she reminded herself of Hannah's previous performance of the lullaby and indicated that now she also wanted to try to play the melody. She used observation as a personal or self-scaffolding strategy on many occasions.

Hannah used self-scaffolding with her use of private speech as she applied previously modeled approaches for identifying correct intervals through carefully listening to each played interval and then stating out loud if it was correct or not. Bodrova

and Leong (2007) note that, "Private speech is audible but directed to the self rather than to other people. It contains information, as well as self-regulatory comments" (p. 68). They also point out that teachers can "encourage children to use private speech to help them learn" (p. 74). In this case Hannah used private speech as a way in which she could self-scaffold and assist her learning. Hannah encouraged Chelsea to watch as she demonstrated her strategies for discovering correct intervals through this process of elimination. Personal strategies may be modeled for children by a variety of members of the community. For example, Hannah may have, at another time, observed others such as Mrs. Pauls or her parents use similar strategies for assisting children with their learning. Rogoff (2003) indicates that "when children play, they often emulate adult and other community roles that they observe" (p. 298). Campbell (2005) acknowledges scaffolding as a way in which children can use their "expert knowledge" (p. 147) to teach other children to do particular tasks. Hannah demonstrated this during her interactions with Chelsea in which she assisted her in learning to perform the melody on the bells. For Vygotsky (1978), make believe play is the only true form of play and examples such as these demonstrate children as they are making believe that they are teachers.

Material strategies involved the use of a variety of materials to meet self-initiated goals. Both girls enjoyed using the carousel bells as they discovered and performed the melodic sequence. The girls' use of social strategies was very evident. Hannah used smiles and kind interactions as she encouraged and supported Chelsea towards the successful performance of the melody. She also involved speech as she directed Chelsea's progress and physical gestures while she pointed to the notes. Social

interaction was also demonstrated when Mrs. Pauls and Hannah worked together while Mrs. Pauls attempted to perform the lullaby melody on the carousel bells and Hannah explained her strategy for success. Later they also worked on performing *Jingle Bells* together. The conversation that I had with Hannah as we used felt notes and staff to construct the melody of *Jingle Bells* involved many social interactions including discussion. de Vries (2005) confirms the importance of social interaction in his description of scaffolding strategies used in the musical development of his son. He specifically notes his son's interactions with him as being significant to musical learning. Within the Vygotskian framework, material and social strategies would be included within categories of shared activity and assisted performance.

Musical play that was child-initiated was central to many of the interactions that took place in this vignette. One exception was my invitation to Hannah to construct the *Jingle Bells* melody using the felt notes and staff. The children initiated most of what went on during their musical play-time. They decided the materials that they wanted to use, the songs that they wanted to play and sing, and what they wanted to do with the songs and materials. St. John (2006) suggests that "if the teaching agenda begins with the child's perspective, . . . scaffolding will lead to a new place not yet known to either partner" (p. 242). She notes that "scaffolding addresses the learning space where growth and development occur across time" (p. 243). de Vries (2005) also emphasizes the importance of acknowledging the intentions of the child. Hogan and Pressley (1997) identify student ownership of the goal as a critical characteristic of scaffolding. However, I recognized that Hannah was in the zone of proximal development for beginning to use

notation and therefore I invited her to consider the possibility of using these new materials to write this melody.

This vignette includes many examples of scaffolding as the children participated in musical play. Shared activity and assisted performance were evident throughout the vignette. There were numerous examples of supportive interactions (e. g., smiling, pointing to notes). Personal, material, and social scaffolding strategies as described by St. John (2006) were used by students and teachers. Personal strategies consisted of techniques such as modeling, observing, and demonstrating. Material strategies were evidenced through the children's use of various instruments and other materials such as the felt notes and staves. Social strategies such as warm relationships, dialogue, smiles, and other physical gestures, were used by students and teachers alike. Strategies such as these can be included under the Vygotskian umbrellas of shared activity where children "use strategies or concepts with the support of another person" (Bodrova & Leong, 2007, p. 79) and assisted performance where children are supported in reaching the higher level of their zone of proximal development through "the help of or in interaction with, another person" (Bodrova & Leong, p. 40).

Vignette Three: Chelsea's Song

Many children enjoyed playing the barred instruments and on this day I circulated around the classroom and demonstrated mallet techniques to a few children during my observations. Emma and Madison faced each other and copied one another as they played the finger cymbals. A group of children gathered together as we prepared to have our

short story/song time. As we assembled I spoke with the children about the mallets and we discussed the many ways in which they could be held. I also took this time to introduce a few other instruments and Mrs. Pauls demonstrated the cabasa and told the children what it was called. We also looked at the finger cymbals together. I had observed several children exploring these instruments during their play and it seemed to be an appropriate time to present their names and explore the different ways in which they could be played.

Ronnie started a discussion about singing that day when he said, "I have a song, the fish in the water. I like that one." I asked him if he could sing it for us and he replied, "I can't sing it." From his response I gathered that he didn't want to sing it alone and I said, "Oh, you can't sing it alone?" and he nodded. Hannah said, "I know *Baby Beluga*!" (the song to which Ronnie was referring). I said, "Yes!" and looked at Hannah and smiled. She began to sing the song with a clear confident voice. Her performance was the start of a steady chorus of requests by many children to perform this song, as well as others, by themselves. They spontaneously organized a line which would allow them the opportunity to take turns performing for the children who chose to be the audience. Sarah sang *Baby Beluga* and changed keys several times during her performance. While the other children listened, Emma began to perform the pat, clap, snap, snap ostinato pattern that they had previously performed when we sang the song as a group. Once she began the ostinato a few others joined in and then a few more until the whole group was performing it together while Sarah sang. The children communicated with their eyes and their actions as they watched and responded to each other. They quietly performed the

ostinato and did not attempt to overpower Sarah's singing. Her voice was clearly heard throughout the whole performance. The whole class applauded when she finished her song.

Many others wanted to sing their own songs. Performing was contagious! A model had been provided and many children were confident that they could perform their solos. Chelsea stood up and declared that she too wanted to sing but she also indicated that she needed some instruments to accompany her. Instantly, Sarah and Samantha stood up and went to find some instruments to accompany their friend's singing. I checked with Chelsea to find out if she wanted to accompany herself or if she wanted other children to play for her. She said, "I want someone else to play." I reminded the players that they should play quietly so that we could still hear the singing and then I said, "OK, here we go." At that point the song began. Chelsea sang very, very quietly and Samantha moved closer and closer and faced her so that she could hear her song. She played her tambourine quietly, with one finger so that the playing would not overpower the singing. The children all listened closely even though it was very difficult to hear her soft singing. The accompanists responded by playing quietly and sensitively and Meagan stood and conducted the group. Although Chelsea was very quiet and shy she wanted to become a singer too on that day and we witnessed the rest of the children respond to her quiet nature and singing with the same soft, gentle instrumental accompaniment.

Commentary

It was somewhat surprising that Chelsea, a shy and reserved child, would volunteer to sing by herself with the rest of the class acting as the audience. However, in an accepting atmosphere of play, Chelsea became a performer during make-believe play. The other children became the accompanists, the conductor, and the audience. The children all acted out their individual roles.

Peer-scaffolding was evident throughout this vignette as the children supported each other's learning in a variety of ways. The environment of respect in which they all participated allowed for the singing to begin. This context was initiated by the intentions of Ronnie who began by introducing the other children to the idea of individual singing. Although he did not want to sing alone he provided an opportunity for others to volunteer. Hannah modeled a singing style that was clear, accurate, and in tune. Once the model had been provided other children were very anxious to participate. Peer-scaffolding occurred in a variety of ways including: modeling, questioning, and warm relations. Assisted performance was provided by Hannah who provided the initial model for the rest of the class.

As the vignette continues Chelsea becomes confident enough to volunteer to perform her solo. In previous vignettes we have seen that she self-scaffolds by observing and listening for long periods of time and then participates when she has spent enough time preparing herself for her chosen task. For Chelsea models are very important along with a warm and accepting environment as she engages in self-scaffolding. We also saw very clearly how her friends scaffolded her through their supportive instrumental

accompaniments and conducting. The other children who formed the audience played their parts very well when they applauded at the right moment. The children all knew what their parts were in this moment of pretend play. The playground of which Huizinga (1950) and Gadamer (1989) spoke was clearly marked, the players all knew their parts, there was back-and-forth movement, and no clearly defined ending was evident. The children were engaged in musical play and many examples of scaffolding were revealed as the children participated in shared activity and while they provided assistance as they acted as the audience for Chelsea, who was the performer. Chelsea was provided with the assistance she required to move to the higher level of her zone of proximal development for singing.

Vignette Four: Ronnie and the Chickadees

Ronnie told me he didn't know how to sing. Every time he tried to sing with the other children in the nursery school class his voice droned a monotone chant rather than producing the light singing sound that most of his 4-year-old classmates could make. From listening to his friends, his teacher, and the other adults at the nursery school, Ronnie knew that, even though he tried, he was not singing.

Ronnie chose to engage in musical play every day. He loved the story *Drumheller Dinosaur Dance* which I had read to the children on one of the initial research days. Following the reading of the story Ronnie enthusiastically suggested to some friends that they tell the story again but this time they could do it in their own way, using instruments. He became the conductor/orchestrator of what turned out to be an hour-long extravaganza

that included drama, movement, chanting, singing, instrument playing, listening, and a variety of other vocalizations. A large group of children participated, some for the whole hour and others for shorter amounts of time. Children freely participated as they came and went from the music play centre where the dinosaur show was being produced.

The participating children vocally improvised high and low sounds as they pretended to be the dinosaurs that rose up and moved down as the text had suggested. Benjamin said that the sound of the cymbal meant that the dinosaurs rise in the morning. Together the children added to this idea and agreed that the drum signified the time for dinosaurs to sleep, the sandblocks suggested rain, and the triangle represented snow.

The children took turns acting as the conductor and by calling out, indicated whose turn it was to play. Children experimented with sounds through unconventional combining of instruments. Sam placed a tambourine on top of his drum as he played and added this interesting sound to the dinosaur musical drama.

One of research assistants remarked in her journal that Ronnie was "an especially strong leader who kept everyone organized." Although many of the other children used their singing voices, Ronnie did not. Instead, he called out, yelled, and chanted his directions and responses. He declared the start of the musical play with a strong, "It's wake up time!" When he yelled, "Wake up!" the other children sang back, "Wake up, wake up" with a clear sol-mi melody. Andrew sang, "Dinosaur band" repeatedly with a sol-mi-re melody. Together, the children played the dinosaur wake up sounds on the instruments with a unified beat that was loud and boisterous. When it was time for the

dinosaurs to go to sleep, the children responded by changing their performance to one that was quiet and slow and there were times when they were completely silent together.

Mrs. Pauls watched the children and listened carefully to their improvised version of the story. During a quiet moment she began to sing a short, improvised dinosaur song of her own, "millions and millions of years ago," she sang as she accompanied herself on the hand drum. She followed this with an invitation for the children to join her in singing as she placed a dinosaur picture book on a nearby table. Ronnie continued as the leader using his chanting, speaking, and yelling voices. His phrase, "All together now, the sun is coming up," meant that the children were all quiet together and then when he called out, "Wake up. Moon is out!" the dinosaurs came to life. On that day, other children also had opportunities to be the conductor and the play continued for an hour. Mrs. Pauls announced that play-time was over and the children were asked to clean up and join her for their structured music time. It appeared that Ronnie and the dinosaur band would have continued with their musical play and dramatization for even longer.

Ronnie's interest in music was evident during the many weeks that followed the dinosaur performance. He became interested in playing the bass xylophone and often accompanied himself with a steady drone accompaniment while he chanted the cheer for his favourite hockey team: "Let's go Oilers! Let's go!" Over the weeks his vocalizing had gradually changed from speaking to a low pitched, limited, more melodic singing style. He told me one day that he liked to sing all the time and spoke about singing in the car along with CDs that his mother would play.

One day Ronnie heard a group of children singing *Twinkle, Twinkle* and decided that he would also like to sing this song. He listened and then attempted to sing but was not able to use a singing voice. Instead he chanted the words in rhythm and used a low speaking sound as his singing. While he sang he accompanied himself on the alto glockenspiel and used one mallet. I joined him and also sang the song while he chanted the words in rhythm. We finished the song and he smiled as he acknowledged his own performance. Hannah was nearby and she asked, "Can I show him something?" I asked Ronnie if he wanted to see what Hannah had to show. He agreed and handed Hannah the mallets. She played the beginning interval for *Brahms' Lullaby* and then played the same interval an octave lower. Ronnie said, "What is that?" I sang the lyrics that Mrs. Pauls had previously taught the children. Ronnie tried to play the melody while I indicated the rhythm. Olivia was also watching as Ronnie played the interval. Hannah played the phrase again and Ronnie carefully watched and listened. He then tried to play it and I pointed to the letters on the bars. Olivia indicated that she too wanted to play. Hannah gave her a pair of mallets and said, "You can have this one." I asked if Ronnie and Olivia could share and they said that they could and they improvised together while I sang *Twinkle, Twinkle*. Ronnie played the rhythm with an improvised melody and Olivia played both the rhythm and the melody in a random way.

Ronnie played and chanted *Twinkle, Twinkle* as Hannah watched and listened. Ronnie knew the words at the beginning of the song but he created his own words for the ending. Hannah looked at me when she heard Ronnie's version and said, "I think it's made up." I replied that it was his song and asked her if she could sing it with him.

Hannah suggested that all of the children who were nearby could sing when she said, "all of us." While the children were singing Sam came over and attempted to take Ronnie's mallets. Hannah looked firmly at Sam and said calmly, "You don't do this." I told Sam that the children were going to sing *Twinkle, Twinkle* and that, if he wanted, he could join them. Hannah said, "Maybe he can have this," and handed him a tambourine. Sam said, "No," and began to whine in protest. Hannah looked at him and then decided to play the tambourine herself while Ronnie played and sang *Twinkle, Twinkle*.

Hannah and Ronnie decided to play *Mary Had a Little Lamb*. Hannah and I figured out the melody for "fleece as white as snow" on the alto glockenspiel. Hannah realized that this sequence sounded like *Hot Cross Buns* and she proceeded to play the whole song. I asked Ronnie if he knew the name of the song she was playing and he answered, "I haven't seen that sound." He then turned his attention to the tambourine. The metal jingles were especially interesting to him and he said, "That's the money talking at the end." Hannah carefully watched and listened as he repeated, "Freddy, Freddy," while he played the beat on the tambourine and Hannah improvised on the alto glockenspiel.

Mrs. Pauls and I introduced many new play materials on a regular basis. As spring approached Mrs. Pauls brought out a new puppet to add to the large collection of puppets from which the children could choose. The newest addition was a bird's nest that held three baby birds. Ronnie was intrigued by the new puppet and with the puppet on his hand he rested his arm in an upright position on the end of the xylophone. He told me that these were his chickadees and that his arm was a tree. I asked him what kinds of sounds

his chickadees made and he responded with his low-pitched chanting sound, "Chickadee-dee-dee." Hannah matched the low sounds on the xylophone. Next I asked, "Can you make your chickadees sing a high sound like the ones we hear the birds outside make?" I demonstrated a high chickadee sound. Spontaneously, Ronnie lifted up his arm and, with the help of the puppet, matched my high-pitched singing sound. He sang, "Chickadee-dee-dee, chickadee-dee-dee" using a light, clear singing sound. We sang back and forth with each other and echoed the sounds of the chickadees with a light high sound. Ronnie had found his singing voice! Hannah went over to some of the other instruments and experimented to find instruments that would produce the light sound that Ronnie was now using. She found a tone bar and said, "That's a good one, isn't it?"

Ronnie continued to be very interested in the bird's nest puppet and he suggested to Hannah that they play a bird song on the xylophone. Together they decide that he should sing the chickadee song in a high voice. The research assistant noted that he sang with a high, light head voice and in the field notes she commented that, "he previously had difficulty singing on pitch or with head voice" (field notes, March 16, 2007). Ronnie and Hannah continued their play and Hannah decided to accompany Ronnie's chickadee song with a variety of instruments beginning with a tone bar. She tried the jingle bells and said "No," for she did not think that the sound matched the sound of Ronnie's chickadee song. When she tried the triangle she was happier with its sounds.

Suddenly, Ronnie declared, "They're flying! They're floating off the tree! They're flying into space!" I said, "They're going really high," as Ronnie sang with an even higher voice. He said, "They're really in space!" and I replied, "Let me hear their

voice in space!" Ronnie responded by singing with a clear, light head voice. He turned the bird's nest into a space ship and declared, "They're flying in a space ship!" Hannah had found a flower pot puppet and she and Ronnie made their puppets sing with each other and then Ronnie said that his birds were going to eat the plants. He continued to play with the bird's nest and manipulated the birds and had each one sing individually. The chickadees had helped Ronnie find his singing voice! From that day onward Ronnie could often be heard singing his chickadee song.

Commentary

Ronnie's story confirms much about Vygotsky's (1978) notion of play as "a leading activity in development" (p. 101). During the weeks that led up to Ronnie's encounter with the chickadee puppet, he was in the zone of proximal development for singing. He was taking many opportunities to be involved with musical play and acknowledged that he could not yet sing. He was interested in participating in many different aspects of musical play, e. g., performing on the bass xylophone and chanting his favourite sports chant, leading a group of children in a musical improvisation of the dinosaur tale. His vocalizing was generally heard as a low pitched chanting sound.

Make believe play was a significant aspect of the musical improvisation of the dinosaur tale. Through their play, the children became the dinosaurs, the conductor, and the instrumentalists. Within the context of make believe and musical play, Ronnie's development in singing was scaffolded in a variety of ways. The initial setting of the context was provided through shared activity when the *Drumheller Dinosaur Dance* story

was presented. As Bodrova and Leong (2007) note, teachers "engage in shared activity by modifying and planning the learning environment. By choosing . . . books . . and play props, the teacher provides assistance to support independent performance" (p. 87). Ronnie provided the ideas and leadership that led to the development of the dinosaur improvisation and his intentions were honoured, supported, and extended by the other children and the teacher. Ronnie was open to suggestions from the other children and together, during the hour of musical play, they continued building, developing, and expanding their musical story. Modeling took place during the play as Mrs. Pauls provided suggestions and sang some of her ideas. The children also provided Ronnie with models of singing, for many could already sing in tune very well.

Joint problem-solving was evident in this vignette. Together the children engaged in the improvisation and worked together to develop the musical story. Many provided ideas about what should happen next in their improvised rendition of the story, which instruments might be the best signifiers of story or movement changes, and which parts of the musical story should be soft or loud. Decision-making was prominent during this time of music making. Through his musical play, Ronnie explored many of the musical concepts that are typically developed in structured music classes (e. g., up and down, high and low, fast and slow, singing vs. speaking).

Ongoing peer-scaffolding was provided by Hannah in many different ways. Through shared activity, she supported Ronnie's musical learning with encouragement that included sharing and providing materials, matching his low pitch and playing the contrasting high pitch (i. e., showing him where he was and demonstrating the pitch that

he should try to attain—a strategy that is often used by music teachers). She provided feedback regarding his singing of *Twinkle, Twinkle* when she demonstrated the difference between high and low in order that he might hear the difference. She was aware of the difference in pitch and it appeared that this was her way of attempting to assist him in developing his own understanding. Bodrova and Leong (2007) emphasize that, "Just interacting with peers is not sufficient to promote a child's development . . .[but] by structuring the situation, the teacher can use peer interaction to further learning goals" (p. 88). In a case such as this, the teacher may have attempted to also draw Ronnie's attention to that which Hannah was showing him and through a variety of activities such as questioning, discussion, and modeling the two children may have each advanced their understanding of high and low. The way in which the teacher intervenes is also very significant and Berger and Cooper (2003) remind us that children's musical play is enhanced "when adults valued children's play through descriptive and encouraging comments" (p. 158).

As the weeks progressed Ronnie continued to be involved in many different music-making activities during his musical play. It seemed that the playful interactions and make-believe play were especially significant to Ronnie's involvement with music and in the development of his musical understanding. Ronnie's fascination with the bird's nest puppet was key in his success in using his singing voice. When he pretended that his arm was the branch and the nest was on the branch he became completely involved with the birds. The one question that I asked him along with the model that I provided seemed to have immediate results and because of his pretend play he could become the birds and

imitate their sound. Once he had experienced the ability to produce the singing sound he seemed to know what he had accomplished and proudly practiced his newly found skills. de Vries (2006) indicates that, in scaffolding musical skills in young children, adults can play an active role in the informal play of children. My involvement with Ronnie involved many of the scaffolding strategies noted by de Vries (2005) such as singing back-and-forth and modeling. Hannah assisted Ronnie's performance through peer-scaffolding strategies. She acknowledged Ronnie's music making by accompanying him on a variety of instruments. She recognized and confirmed his vocal accomplishment by matching his pitch using a variety of suitable instruments.

Ronnie applied self-scaffolding strategies by using physical gestures to indicate the highness of his singing sounds as he made his chickadees go into space, lifting up his arm and making them go higher and higher and finally turning the bird's nest into a space ship. At this time he may have been applying his skills to a new musical context as his mastery of singing increased. Ronnie had moved from the interpsychological realm where he was learning through social interaction to the intrapsychological realm in which he was applying his skills in a new form of play. Within the context of make-believe and musical play Ronnie experienced a variety of scaffolding strategies which enabled him to move through the zone of proximal development for singing.

Summary of the Commentaries

Musical play provided a context from which these three children could explore many aspects of music and in turn indicate their zones of proximal development for

musical growth. As Vygotsky (1978) reminds us, "play is a leading factor in development" (p. 101) and "play creates a zone of proximal development in the child. In play, a child always behaves beyond his average age, above his daily behavior; it is as if he were a head taller than himself" (p. 102). It was through musical play that they indicated the zones of proximal development. While Hannah was involved in musical play her actions and interactions demonstrated her place in the zone of proximal development. She clearly showed her development of melodic understanding as she constructed melodies on instruments and with notation. During musical play she became both a performer and a teacher. Chelsea showed her understanding of what it was to be a solo performer and through her play, sang on her own while others provided instrumental accompaniments. Ronnie was the voice of the birds in the nest and through his pretend play was able to find and use his singing voice.

Scaffolding takes place within the zone of proximal development in many different ways. Because of the many scaffolding incidents in which the children were involved they were able to reach the higher levels of their individual zones of proximal development.

There were many incidents of peer-scaffolding. The social environment that is embedded within the play environment contributed significantly to the number of incidents involving peer-scaffolding. As the children interacted with their peers through discussions, questioning, demonstrations, and modeling they were often able to move towards the higher level of their zones of proximal development. Vygotksy (1978) informs us that

> an essential feature of learning is that it creates a zone of proximal development; that is, learning awakens a variety of internal developmental processes that are able to operate only when the child is interacting with people in his environment and in cooperation with his peers. (p. 90)

Peer-scaffolding occurred when Christopher observed Hannah attempting to play the same tune on a variety of instruments. After watching for a short time he informed her that she simply needed to remember the letter names that were printed on the bars and then she would be able to correctly play the melody every time on each different instrument. This is also an example of assisted performance.

Hannah used peer-scaffolding to help Chelsea perform the melodies that she wished to play. Her peer-scaffolding techniques included physical gestures (pointing to the notes), modeling/demonstrating (Hannah playing a melody for Chelsea), and smiles and supportive remarks (Hannah encouraging Chelsea). Once again, assisted performance was prevalent in their interactions.

Many of these same scaffolding strategies were used by the teachers. Physical gestures were often used to point to notes, smiles and encouraging remarks were prevalent during many of the interactions, and modeling was used to remind Ronnie of the sounds chickadees make. These too were examples of assisted performance where behaviors were performed by the children with the help of or in interaction with the teacher (Bodrova & Leong, 2007).

Self-scaffolding occurred on several occasions. Hannah demonstrated self - scaffolding when, during her musical play, she pretended to be both the student and the

teacher as she used a trial and error process in deciding on correct intervals to match the song that she wanted to perform. She used private speech to assist her as she indicated to herself verbally whether or not she had found the interval for which she was searching. As she played at being the teacher she appeared to be using a strategy that she may have seen used by her nursery school teacher or another adult who was engaged in teaching and decision making. In many ways she was assisting her own performance through self scaffolding.

Scaffolding occurred through many uses of assisted performance. Interactions in which the three children participated during musical play were supported by their peers and adults alike, who used smiles, encouraging remarks, physical gestures, models, demonstrations, and speech to assist the children in performing musical skills that could not have been accomplished without assistance.

During times of shared activity, social interaction is key. These children had chosen to be involved in music through play and their intentions were honoured as they made their own choices regarding the ways in which they participated, the materials they selected, and with whom they chose to play. Student ownership of the activity is a characteristic of shared activity. It is also important for the zone of proximal development to be recognized. An example of this occurred when Ronnie decided to play with the bird's nest puppet. I recognized that he was in the zone of proximal development for singing and through playful interactions which involved the use of materials (the puppet), questioning (can you make your voice sound like the chickadees who are outside?), demonstration/modeling (teacher models the singing) during shared activity, I provided

assistance which enabled him to reach his higher level of the zone of proximal development in singing.

CHAPTER SIX:

ADDRESSING THE RESEARCH QUESTIONS

This chapter addresses the two research questions upon which the study was built: *1.) How do pre-school children scaffold their own and their peers' musical understanding during musical play?* and *2.) How do early childhood educators scaffold young children's musical growth and understanding during musical play?* The questions were approached concurrently during two phases of the research process. In Phase One of the study the questions were approached from a perspective that included all of the participating children. Phase Two focused on the three children (Hannah, Ronnie, and Chelsea), identified as those who, during musical play, were particularly interested in and/or suited to scaffolding strategies, behaviours, and techniques as related to their growth in musical understanding. Tools associated with ethnography including transcribed observations, video tapes, photographs, and artifacts were used to collect the data.

Once the data from both phases were combined, collapsed, summarized, and analyzed, findings emerged in two layers. Layer One indicated those scaffolding techniques frequently and commonly implemented by children, their peers, and the teachers during musical play. The second layer revealed themes which answered the research questions from a broader theoretical and educational perspective. This chapter presents the findings of both layers, interprets the data, and answers the research questions from a sociocultural viewpoint.

Layer One Findings

During both phases of the research, the participating children were observed and documented in a naturalistic environment of unstructured play. They were encouraged to take part in a variety of activities of their own choice including music and the materials of music. The research questions, as well as the definitions of play, musical play, and scaffolding as described and defined in this study provided the focus from which the children were observed and the data were collected.

The children engaged in musical play for differing lengths of time and varying degrees of intensity. Incidents of musical play, based on the essence of play as described by Huizinga (1950), Gadamer (1989), and Vygotsky (1978), were identified. According to Huizinga and Gadamer the characteristics of play include the following qualities: back-and-forth movement, to-and-fro dance-like nature, sense of freedom, unpredictable ending, and performance of roles. Vygotksy (1978) regarded play as the leading activity in development and viewed play as integral to the creation of the zone of proximal development.

Within the context of musical play, the children were provided with opportunities to interact with music materials in an unstructured environment. As the children in the study participated in musical play, they exhibited many of the characteristics of play described by Huizinga (1950), Gadamer (1989), and Vygotsky (1978). The children were often highly engaged in make-believe play during their times of musical play and the research team observed the children as they acted out roles such as musical conductors, teachers, dinosaurs, and performers. Through my observations of incidents of pretend

musical play I was able to identify the child's place in the zone of proximal development for growth in musical understanding, for as Vygotsky (1978) states, "play creates a zone of proximal development" (p. 102). The interactions during pretend play that were embedded within the musical play allowed me to see the many levels at which the children were performing as well as indications of behaviours that would be developing in the near future. I was able to observe the children's various zones of proximal development during musical play.

The first layer of findings revealed many of the scaffolding techniques described in the early childhood education literature (Jordan, 2004; MacNaughton & Williams as cited in de Vries, 2005; St. John, 2006; Wood & Attfield, 2005). In this study, the following scaffolding techniques were observed during incidents of musical play: questioning, prompting, praising, confirming, giving feedback, expanding, repeating back, joint problem-solving, modeling, collaborating, and gesturing. The following section provides examples of the identified scaffolding techniques in both Phase One and Phase Two of the research.

1. Questioning

Phase One Findings (All children)

Questioning was used by teachers and children to scaffold learning in both music and non-music play settings. Mrs. Pauls posed questions that challenged the children to either repeat something that had been previously learned and/or try something new as an extension to a previous activity. While the children were engaged in musical play,

following the introduction of a song during the whole group music experience, she asked questions such, "Can you sing the new song to me?" When she recognized that children were in the zone of proximal development for the expansion of their skills associated with instrumental performance, Mrs. Pauls asked questions which she hoped would challenge the children to think more deeply about the activities in which they had been involved. Open-ended questions like, "Have you ever thought about using some of the other instruments on the shelves?" were posed. Following this question, she included a short demonstration of a few instruments. This supported the children in their learning by expanding their instrumental choices. During the dinosaur musical play she asked two children if they thought dinosaurs could make sounds. This prompted the boys to enter into an extended period of pretend play in which they created a dinosaur rhythm called the "dinosaur crack," as well as a song that was sung by their plastic dinosaurs when they came to life. During their pretend play the boys also became the dinosaurs who performed many sophisticated syncopated rhythms. The playful, brief questions posed by Mrs. Pauls contributed to the children's extended and expanded musical play.

Children asked their own questions, often to others and sometimes to themselves. The children scaffolded themselves by using private speech to ask and answer their own questions. During his play time, Ethan created his own word and sound-matching game in which he challenged himself to answer his own questions. He was in the zone of proximal development for reading beginning sounds and through his play he became his own teacher as he privately practiced reading. During musical play, Justin scaffolded himself by using private speech in the form of private singing. He practiced singing to

himself a sol-mi melody with altered words. The words of the original song were "swimmy, swimmy" and he changed them to "crabby, crabby" to coincide with an art activity with which he was occupied. Madison experimented with a tick-tock block and, through private speech, confirmed her understanding of same and different sounds when she said, "Those are different sounds!"

Phase Two Findings (Three identified children)

In this phase of the study questions were often used to encourage the children to move toward higher levels of their zones of proximal development. For example, I asked Chelsea, "Can you play it for us?" and "Can you play it and we'll sing?" for I recognized that she was in the zone of proximal development for instrumental performance and these questions both encouraged and assisted her in reaching her higher level of the zone of proximal development. Her intentions were acknowledged and she could make the final decision regarding whether or not she wanted to or whether she could perform on her own. My questions helped her to recognize that she indeed wanted to perform, that she could perform, and that others were interested in her performance. It is possible that because of her shy and reserved manner, she may not have stepped forward and performed without being asked or invited. The musical play environment encouraged interactions such as this where children were able to make choices regarding their musical involvement.

I asked Hannah if she wanted to write the notes for *Jingle Bells* after she had played the tune on the bells. Hannah enjoyed performing melodies on various instruments

and I wondered if she was interested in exploring another aspect of music—that of writing melodies. Because of her positive answer I was able to scaffold her as she constructed the melody using a felt staff and notes which she could manipulate. Through our discussions, listening, trial and error writing, and checking back and forth between the notes and the sounds of the instrument, Hannah was able to write the melody that she had previously played. As we worked together I also asked scaffolding questions such as, "What comes next?" "Is the next note higher or lower or is it the same?"

The question that I asked Ronnie after he sang his first rendition of the chickadee song was instrumental in scaffolding his ability to match pitch and use a light head tone. I asked, "Can you make your chickadees sound like the ones we hear the birds outside make?" This question, in combination with his memory of the model of chickadee sounds and his participation in pretend play, helped him advance in the zone of proximal development for singing.

Children also asked questions to facilitate opportunities to scaffold one another's musical growth. When Ronnie was singing *Twinkle, Twinkle* and using his low chanting voice, Hannah asked, "Can I show him something?" She wanted permission to demonstrate the difference between the low sounds that he was making and the higher sounds that she thought he should be using. In her mind, Hannah had a model of what she thought singing should sound like. In this example of peer-scaffolding we also saw her use many of the social skills which had been previously modeled for her by others. It is pointed out by John-Steiner and Souberman (1978) that, "While imitating their elders in culturally patterned activities, children generate opportunities for intellectual

development" (p. 129). She was very aware of Ronnie's feelings and wanted to ensure that her offer of assistance was acceptable.

2. Modeling and Demonstrating

Phase One Findings (All children)

Although modeling and demonstrating have similar meanings it was important to this study to note the subtle differences in the two definitions. According to the *Oxford Dictionary*, demonstrating is defined as "giv[ing] a practical exhibition and explanation" (p. 381) while the meaning of modeling is "us[ing] as an example for something" (p. 915). Modeling and demonstrating were used by children and adults in two distinct ways to scaffold musical growth during musical play.

Children and teachers often demonstrated music skills for one another. On the first day of musical play, the children were observed demonstrating instrument playing techniques for their peers. Ronnie saw Daniel playing the cabasa and asked what it was. Daniel said, "You wiggle it," as he demonstrated the playing technique he had discovered. Ashley showed the sandblocks to Sarah and said, "You have to do it like this; very softly." Sarah demonstrated her "correct" way of playing the cabasa by shaking and rubbing it. Jamie helped Angie play the frog guiro when she said, "Let me show you where the stick goes."

Mrs. Pauls provided both models and demonstrations for the children in many ways. She watched the children and scaffolded their instrument playing and dancing by using demonstrations and explanations. For example, she observed one way in which the

frog guiro was being played and said, "This is another way you could do it," as she demonstrated a second approach. The child carefully watched and then added this technique to her playing repertoire. Mrs. Pauls recognized that through musical play, the child was indicating her place in the zone of proximal development for playing instruments and through this brief demonstration and explanation the child was scaffolded to the higher level of performance.

Models were used in a variety of ways to scaffold children's learning during times of musical play. When Mrs. Pauls noticed that the children were curious and interested in the role of the musical conductor she began to use the term "conductor" and asked questions about conductors. As she played with the children, she pretended to be a conductor. The children later used this model in their own play. On several occasions during their pretend play they became conductors and responded musically to physical gestures performed by a child who had been designated as the conductor. Their pretend play also prompted the children to use music vocabulary associated with tempo (e. g., fast, slow, and medium). They enjoyed taking turns as the conductor while the others acted as performers and responded to the conductor's gestures.

Sometimes models were provided by memories which the children drew upon during their musical play. Ashley created her own dance to *Octopus's Garden* and incorporated moves from a variety of sources including her dance lessons. She was in the zone of proximal development for creating movement sequences to music. Models, which had been previously presented and practiced, enabled her to engage in self scaffolding. Models were not always presented at the time that they emerged in the

children's musical play. It appeared that models could also come from previous encounters and experiences in which the child had participated.

Phase Two Findings (Three identified children)

When she sang *Baby Beluga* for the class, Hannah modeled a singing style that is generally regarded in early childhood music curriculum as that which teachers strive to develop in young children. Her model provided a scaffold for several other children who were in the zone of proximal development for group and independent singing. One of the goals of Pre-Kindergarten Music curriculum according to the Canadian Coalition for Music Education in Canada (2000) is "singing and chanting using songs, rhymes, and lullabies" (p. 17) as well as singing "both as a group and individually" (p. 17). Through their own initiative within a context of musical play, the children were involved in both of these curricular goals. When Hannah sang the song for the class she provided a model which many of them later copied. They had not been told that this is how they should sing and yet they seemed to know that Hannah's singing was something that they might try to imitate.

On many different occasions I also provided a model of singing. During the telling of the story *Little Clam*, I improvised little clam's song and therefore, within the context of storytelling, the children were informally exposed to the model of singing that is associated with current Canadian early childhood music curriculum. I also used this singing model as an example of the chickadee song during my interactions with Ronnie when I asked if he could make his voice sound like the chickadees that lived outside. The

model, the question, and the playful environment scaffolded Ronnie in moving to the higher level of his zone of proximal development for singing.

Chelsea often used models for self-scaffolding. She watched Hannah play the *Brahms' Lullaby* tune on the carousel bells and after several observations of the model she declared, "I can do that!" She also used Hannah's model of singing *Baby Beluga* to scaffold herself in performing as a soloist. Models were very important to Chelsea's advancement in her zone of proximal development for her growth in musical development.

Demonstrations within a context of musical play appear to be more specific and goal-oriented than models. For example, I demonstrated to Hannah a technique for holding mallets so that she would be technically more able to perform her chosen melodies on the Orff instruments. Hannah also used demonstrations effectively and was quick to show her method of finding intervals to Chelsea in order that she could gain skill in locating intervals and constructing a melody on the Orff instrument. As she began her demonstration she said, "Listen, I'll show you. Watch!"

Models provided children with ideas regarding where they might go in their learning and sometimes there was seemingly no direct interaction with those providing the models. For example, children often employed previously experienced teaching techniques when they were teaching their friends. During pretend play, children enjoyed acting as teachers. To assist them in performing their role they used familiar models. John-Steiner and Souberman (1978) remind us that, "While imitating their elders in culturally patterned activities, children generate opportunities for intellectual

development. Initially, their games are recollections and reenactments of real situations; but through the dynamics of their imagination and the recognition of implicit rules governing the activities they have reproduced in their games, children achieve an elementary mastery of abstract thought. In this sense, Vygotsky argued, play leads development" (1978, p. 129).

Models were often used in self-scaffolding as well as peer- and teacher-scaffolding. At times the scaffolding was a result of direct interaction and occurred almost immediately as in the case of Ronnie and his singing of the chickadee sounds. In a case such as this, where the context was musical play, the child did have a choice regarding whether or not he wanted to use the provided model. This is similar to the child who uses a previously observed model within the context of musical play since the child is making his/her own choices based upon individual intentions. According to Vygotsky (1978), "children can imitate a variety of actions that go well beyond the limits of their own capabilities. Using imitation, children are capable of doing much more in collective activity or under the guidance of adults" (p. 88). Musical play provided the opportunity for children to use models for imitation.

3. Prompting

Phase One Findings (All children)

Prompts, in the form of physical gestures and speech, were used during musical play to encourage growth in musical skills and understanding. For example, Madison furthered her friend's understanding of the location of high and low sounds on the Orff

instruments when she pointed and said, "That's a low A and that's a high A." During Phase One of this study, prompts were not as clearly identifiable as they were in Phase Two. In many ways prompts serve to elicit a specific, predetermined behaviour or response. During musical play, there is often no known ending and therefore it is debatable whether or not prompts in the general educational sense would be commonly used. This may answer why very few examples of prompts were evident in the context of Phase One.

Phase Two (Three identified children)

The Oxford Dictionary defines prompting as, "caus[ing] someone to take a course of action" and "assist[ing] or encourag[ing]" (p. 1144). In education a prompt is often referred to as a strategy, technique, or tool that a teacher might use to assist a student in successfully completing a task. This use assumes that there is a preconceived goal or a correct answer to a question or a problem. It also implies that the teacher's intentions are in the forefront. Within a musical play context, the teacher does not necessarily know the end result nor does the child, and therefore I believe that the use of prompts or prompting within the context of play and musical play to be different from the definition of prompt as it is commonly used within some other educational circles. In this study, discussions with groups and/or individual children were acknowledged as prompts to promote or extend incidents of musical play. Prompt was used as a form of encouragement within the musical play context and was most often the result of the children's contributions during instances of musical play or through informal conversations. For example, a discussion

might be regarded as an example of a prompt and the children in this study could choose to use or not use the ideas presented during a discussion to further their musical exploration. During musical play, the children's intentions were acknowledged as leading the development of musical experiences. This occurred when I told the story of *Little Clam* and we discussed loud and soft sounds and the idea of a lullaby. Following our discussion the children initiated their own musical play and some children chose to use ideas from the initial conversation during their musical play. Discussion scaffolded some children in the application of music-specific vocabulary to musical play interactions.

Specifically-designed prompts were sometimes also used by teachers and peers to scaffold learning during musical play. For example, Mrs. Pauls used a technique of singing the colours of the bells in order to scaffold Hannah in accurately playing her self-selected melody. During her musical play Hannah wanted to perform specific melodies and through the singing prompts, Mrs. Pauls scaffolded her in the realization of her self - created problem. The prompt assisted Hannah in moving to a higher level within her zone of proximal development for melodic performance.

4. Expanding

Phase One Findings (All children)

Expanding participation during musical play provides opportunities for scaffolding growth in musical understanding. Expansion refers to an increase in depth of participation and growth and increasing intensification of involvement, activity, and intention. Invitations for participating in musical play were presented by children and

adults alike. Opportunities for expanding participation were often provided by invitations. Children who were in their zones of proximal development for the particular skill for which the invitations were given accepted the invitations and used them to springboard to their next level of musical involvement. For example, after observing the children while they sang and played instruments, Mrs. Pauls said, "Let's see if we can all start and end together." One of the skills included in early childhood music curricula includes singing and playing instruments with others. Mrs. Pauls noticed that the group of children was in the zone of proximal development for ensemble performance during their musical play and, through her invitation, encouraged the expansion of the ensemble performance. The children were praised by Mrs. Pauls for their ensemble work.

Mrs. Pauls carefully and thoughtfully entered into the children's musical play. She watched and listened and, when the time seemed fitting, she would often discretely join the children in their play. For example, after observing the children during their dinosaur production, she stopped by and added her improvised song of "millions and millions of years ago" to their dinosaur musical creation. Mrs. Pauls' unobtrusive, casual contribution scaffolded the children by expanding their creative musical production through an unsolicited contribution. She also provided verbal encouragement and support as the children worked together on their improvised production.

Teacher and children's invitations, ideas, and questions were used as scaffolds to encourage expanded participation in musical play. An example of this occurred when I asked the children in the dinosaur musical extravaganza if they wanted their sounds to go from low to high. Their enthusiastic response to the question led to a further development

and expansion of their interpretive performance. The expansion question and the use of music-specific vocabulary were used as scaffolds to assist the children in reaching the higher levels of their zones of proximal development for musical improvisation and interpretation.

Phase Two Findings (Three identified children)

Examples of expanding within the scaffolding framework were identified through the observation of children as they performed or participated in musical play. Ideas initiated by the children often resulted in the expansion and growth of original musical play activities. Hannah played the melody of *Jingle Bells* on the carousel bells and then we added the song's rhythm. She said, "Let's all do it together now." She wanted others to join her in the experience and through her initiative and the expression of her intentions she moved to the next level of the zone of proximal development for performance with a group. She wanted to move from her individual performance to performing with others.

The dinosaur performance was another example of expanding. The children who participated in the dinosaur improvisation used musical play as a venue for their own musical interpretation of a story. The performance expanded as the children moved back and forth with ideas and suggestions, not knowing where their improvisation would lead. It was a wonderful example of what both Gadamer (1989) and Huizinga (1950) spoke of as being characteristic of the essence of play—the back and forth movement, the unknown ending, and the taking on of roles. The children's intentions, both individually

and as members of the group, were honoured by one another. The improvisational nature of the production demonstrated a combination of expanded participation, collaborative efforts, and joint problem solving. The children participated in peer and self-scaffolding as they participated in musical play.

5. Collaborating

Phase One Findings (All children)

Booker (2005) reminds us of the importance of the development of relationships in the provision of a foundation for children's learning and development. Collaboration between children or between a child and an adult provides another way in which scaffolding can occur. In a scaffolding relationship it is presumed that one person is more knowledgeable or the expert and in the case of this research, a child often assumed the role of leader during musical play. During Phase One there were some examples of collaboration. In one instance, children were playing instruments side by side and one child said to another, "I'll play this one and you play the other one." They were collaborating on their performance and one was providing a scaffolding model for the other as they played.

At another time during Phase One, several children collaborated as together they formed a dancing line in response to a recorded piece of music. They seemed to move spontaneously together as they followed the leadership of one or two children who, through their efforts and enthusiasm, prompted the other children to participate. The collaborative efforts of the group provided a scaffold for their movement response to a

recorded piece of music. Many of the participating children were scaffolded in their movement responses by the model of dancing together provided by the leading children. The children's participation was not suggested or led by the teacher but was solely led by the children within the musical play context.

Phase Two Findings (Three identified children)

St. John (2006) acknowledges collaborative efforts as significant in the establishment and sustaining of flow during musical learning. Her research indicates that as children work together towards a common goal, collaborative efforts assist them in the realization of their goals. In musical play, however, the goal of the activity is generally unknown to both the children and teacher.

Collaborative efforts were evident in many instances during Phase Two of this research. Peer-scaffolding occurred during an interaction that included Hannah and Christopher. Christopher watched Hannah experiment with sounds as she constructed a melody on the Orff instruments. Once she had found the melody on one instrument she went to another and began to use her trial and error strategy of listening and experimenting. Christopher collaborated with Hannah and said, "It's easy! We can use the letters on the bars to help us find the sounds!" Christopher took on the role of the expert and Hannah the role of the novice as Christopher used peer-scaffolding with Hannah during musical play. Christopher assisted Hannah in moving through the zone of proximal development for the construction of melodies on varying instruments by using a number of techniques including collaborative efforts, dialogue, and warm relationships.

Hannah and Mrs. Pauls used collaborative efforts when they worked together to construct the *Brahms' Lullaby* phrase on the carousel bells. Hannah initiated the problem and requested the assistance of Mrs. Pauls in order that she could address her challenge of melodic construction. Together they tried a variety of approaches and techniques while they worked at constructing the melody phrase by phrase. They alternated roles as expert and novice while they scaffolded each other. The free-flowing nature of musical play was observed as both Hannah and Mrs. Pauls grew in their musical understanding through interactions during musical play.

Hannah was instrumental in scaffolding the skills of many other children by using collaborative efforts during times of musical play. Peer-scaffolding was observed on various occasions as Hannah and Chelsea engaged in musical play together. Hannah most often took on the role of expert and Chelsea that of novice during their collaborative efforts.

6. Joint Problem Solving

Phase One Findings (All children)

During their musical play children often created their own problems and then worked together to search for solutions. Collaboration was evident as together children solved musical challenges. Daniel and his friends enjoyed performing together on the Orff instruments. As they progressed in their play, the boys wanted to use only one instrument to perform their composition. I had removed some of the instrument's bars (F and B) in order that it was in a set up in the scale of C Pentatonic. The boys saw this as a

problem and felt that they needed to fill all of the empty places on the instrument. Consequently, after a brief conversation, they decided to borrow bars from other instruments and fill in the blanks. Together they solved their problem of not having enough bars and once all of the empty spaces had been filled and the instrument had been arranged to their satisfaction, they happily performed their improvised composition together. During this incident of peer scaffolding, musical play provided an opportunity for these children to organize their materials and express themselves musically through their participation.

Diaz et al. (1990) discuss joint problem solving from a child-adult perspective and note that "both share knowledge and responsibility for the task" (p. 140). In the instance of children who are working together to solve a problem, they also share their knowledge and responsibility to solve their self-created problems and challenges.

Phase Two Findings (Three identified children)

Joint problem-solving was very clearly displayed in the interactions of Hannah and Chelsea. They wanted to play the *Brahms' Lullaby* theme together on the carousel bells. For them, together meant playing the melody in rhythm one note after the other—each taking turns playing one note at a time and resulting in a smooth performance of the melody. Together they first practiced producing the correct notes one after another and when they had accomplished this they then went on to ensure that they could also perform the melody with rhythmic accuracy. They collaborated and cooperated to achieve the solution to a problem that had emerged from their musical play. They had not

spoken out loud about their goal they simply went about trying to perform together during their playful interactions. Even though there was an end result it did not appear they had made a plan in advance. Their duet performance emerged from their musical play. They were scaffolded by one another through physical gestures, smiles, the acknowledgement of their intentions, and through aural and kinesthetic feedback. Joint problem-solving required the inclusion of many of the other scaffolding techniques in order that the children were able to move to their next levels of their individual zones of proximal development. Peer- and self-scaffolding were evident in their interactions.

7. Praising, Confirming, and Providing Feedback

Phase One Findings (All children)

When she noticed children performing, Mrs. Pauls provided support through ongoing praise and feedback. She used verbal praise, encouraging remarks, and physical gestures including smiles and hand clapping. The children also encouraged one another with remarks such as, "That's beautiful music!" exclaimed by Chelsea who complimented Meagan's singing. The use of praise, confirmation, and provision of feedback were often used in combination with other strategies to scaffold children during musical play.

Phase Two Findings (Three identified children)

Numerous examples of praise, confirmation, and provision of feedback were noticed during Phase Two of the research. Mrs. Pauls had created an atmosphere of

positive relationships within the nursery school setting and therefore remarks that were supportive were common during each school day. She did not give praise for the sake of praising children but she used praise when children had achieved success in many of the activities in which they were involved. During their musical play times, children received praise, confirmation, and feedback from Mrs. Pauls and the other adults in the school.

For example, after several attempts, Hannah successfully played the melody that she was searching for. Mrs. Pauls praised and confirmed her success with one word, "Good!"

Summary

Scaffolding procedures described as beneficial in the early childhood music education literature were apparent in this study of scaffolding during musical play. During both phases of the study, examples of questioning, prompting, praising, confirming, giving feedback, joint problem-solving, and modeling were observed. Additionally, the findings of this study point to the following scaffolding techniques as common occurrences during musical play: questioning, modeling and demonstrating, prompting, expanding, collaborating, joint problem solving, praising, confirming, and providing feedback. During Phase Two, as the children and the teacher became more familiar and comfortable with the context and the available musical choices within the unstructured play environment, there was an increase in the number of incidents and the level of depth and intensity of scaffolding. The teacher's and researcher's abilities to perceive and respond to the intentions of the children and to recognize the zones of

proximal development were also key in the utilization and development of scaffolding interactions during musical play.

Layer Two

After the initial analysis had been completed the research questions were answered on the basis of the first look at the data. In response to the research questions of: 1.) *How do pre-school children scaffold their own and their peers' musical understanding during musical play?* and 2.) *How do early childhood educators scaffold young children's musical growth and understanding during musical play?* it initially appeared that the findings of the research pointed to the idea that both pre-school children and early childhood educators scaffold musical growth and understanding during musical play in much the same ways: through questioning; modeling and demonstrating; prompting; expanding; collaborating; joint problem solving; praising, confirming, and providing feedback; and the use of physical gestures.

However, it seemed important to look more closely and deeply at the data in relation to the theories presented by Vygotsky (1978) regarding play and the zone of proximal development, musical play, and the notion of scaffolding as presented by Wood et al., (1976). In many ways the initial answers seemed too simplistic. I wondered if there was a recipe for scaffolding during musical play that could be followed by all teachers and children. Bodrova and Leong (2007) point to Vygotsky's ideas about learning and development as being especially helpful in "explaining why teaching is so difficult. We

cannot make exact prescriptions that produce developmental changes for every child since individual differences are to be expected" (p. 13).

It appeared to be vital to look once again at what Vygotsky (1978) has taught educators regarding the zone of proximal development and the role of play as a leading activity in development. As I looked at the list of categories which described the ways in which scaffolding took place during this study of musical play I considered the importance of the social aspect of learning and as Bodrova and Leong (2007) in their interpretation of Vygotsky's theories, point out, "It is within everyday exchanges . . . that learning occurs" (p. 79). This statement helps us recognize that learning occurs when the young child is engaged in play (play being part of the child's everyday life) and during times when exchanges are taking place. Vygotsky (1978) reminds us that for the young child, "play creates a zone of proximal development" and it is through play that we can see "the child of tomorrow" (Bodrova & Leong, 2007, p. 133). This research revealed that during musical play children show where they are in the zone of proximal development for growth in many aspects of musical understanding. Through play Hannah and Ronnie both indicated their future musical skills. As the research progressed, Mrs. Pauls and I became more proficient in recognizing the zone of proximal development during musical play and this assisted us in scaffolding the children in a variety of different ways depending upon what the children themselves were doing and saying. We used many of the techniques that were noted in the first level of analysis.

How then could these findings be summarized in order that educators could possibly apply them to their own, unique teaching situations? It is widely known that no

one teaching situation is like another and therefore, how might the findings of a study such as this impact other early childhood music teaching situations? I looked to the writings and interpretations of Vygotksy (1978) once again to help me to understand the findings.

Assisted Performance

Many of the scaffolding techniques that were evident in the findings of this study point to assistance that children, peers, and adults provide themselves and each other that aid in reaching higher levels of the zone of proximal development during musical play. Within a Vygotskian framework, activities such as questioning, modeling and demonstrating, prompting, expanding, praising, confirming, and providing feedback are included within the category of assisted performance. Bodrova and Leong (2007) maintain that interactions included in assisted performance can also "take the form of indirect help, such as setting up the environment" (p. 41). Therefore, assisted performance during musical play included the organization of the musical play environment as well as the other listed techniques and activities. Within the zone of proximal development "a child's level of assisted performance includes any situation in which there are improvements in the child's mental activities as a result of social interaction" (Bodrova & Leong, 2007, p. 41). Assisted performance during musical play included peer and adult interactions as well as self-scaffolding strategies such as private speech.

Shared Activity

According to Vygotsky (1978) mental functions can be shared and these functions "exist in shared activity" (Bodrova & Leong, 2007, p. 79). Vygotsky (1978) insists that assistance is a vital part of the zone of proximal development and shared activity is one means of providing assistance. Many of the techniques used for scaffolding during musical play were observed during shared activity. Shared activity "is a means of providing the assistance children need at the higher levels of the ZPD" (Bodrova & Leong, 2007, p. 79). It is important to note that shared activity occurs at the higher levels of the zone of proximal development. Assistance is now provided to sustain the higher level.

The social context of shared activity was evident in many instances during this study, The role of peers in shared learning was observed in instances that involved children like Hannah and Chelsea as they played alternating notes on the carousel bells to perform the *Brahms' Lullaby* theme. Hannah provided the context and initiated the idea and through the interactions that ensued assisted Chelsea in maintaining her level of performance in the upper level of her zone of proximal development.

Teachers were also involved in shared activity during musical play. I was directly involved with Ronnie's play as he pretended to be the chickadees in the nest. Through our shared involvement in the pretend play along with the singing model of chickadees that I provided, Ronnie was first able to reach the higher level of the zone of proximal development and then because of our continued interactions he was able to continue to perform at this higher level of the zone of proximal development. Mrs. Pauls and Hannah

constructed the melody of *Brahms' Lullaby* through assisted performance and then sustained their performance with practice during times of shared activity.

Assisted performance and shared activity within a Vygotskian framework are identified as the themes of level two of the data analysis. These categories serve to answer the research questions from a broader educational perspective. By using broad categories such as assisted performance and shared activity, educators can apply their understanding of these terms to their own unique contexts of musical play.

In this study assisted performance included the following scaffolding techniques that helped children reach their higher level of the zone of proximal development during musical play:

- Questioning
- Modeling and Demonstrating
- Prompting
- Praising, Confirming, and Providing Feedback
- Physical Gesturing

Shared activity included those scaffolding techniques that helped sustain the higher level of the zone of proximal development. For the most part the techniques are the same as those of assisted performance with the inclusion of additional incidents of collaborating and joint problem-solving.

- Questioning
- Modeling and Demonstrating
- Prompting

- Expanding
- Collaborating
- Joint Problem Solving
- Praising, Confirming, and Providing Feedback
- Physical Gesturing

In addressing the research questions: *1.) How do pre-school children scaffold their own and their peers' musical understanding during musical play?* and *2.) How do early childhood educators scaffold young children's musical growth and understanding during musical play?* the findings of this study indicate that pre-school children and early childhood educators scaffold young children's musical growth and understanding through assisted performance and shared activity. These two categories include a variety of activities and techniques including those that are listed above. It was observed that often the strategies do not occur in isolation; instead, combinations of the strategies are most often employed by children and teachers. This was also observed and noted by de Vries (2005).

Research and other scholarly writing concerning the topic of scaffolding in early childhood education often provide lists of strategies that are considered to be effective. However, many of these lists would be specific to the context in which they are considered, much like the list of the findings of layer one of this research. In order to consider the differences in contexts and populations it is vital that a deeper look be taken at scaffolding procedures and identify them in light of the zone of proximal development as described by Vygotsky (1978) and the original definition of scaffolding as described

by Wood, Bruner, and Ross (1976). The findings of this research point to assisted performance and shared activity as the ways in which scaffolding for growth in musical understanding are carried out by young children, their peers, and teachers during musical play.

CHAPTER SEVEN:

SCAFFOLDING AND MUSICAL PLAY:

CONSIDERATIONS FOR THE FUTURE OF EARLY CHILDHOOD MUSIC EDUCATION

This study began with an exploration of how the interactions of peers and adults impact learning during incidents of musical play. As the study progressed and the children and adults became more comfortable and familiar with the environment of unstructured musical play, incidents of play involving music became more pronounced and noticeably evident. Vygotsky's concept of play as leading development was noticeably observable within a musical play context. Through musical play the children in the study indicated their places in the zones of proximal development for growth in musical understanding.

Studies and scholarly writing on the topics of play and scaffolding and their relationship to learning in the general field of early childhood education are numerous. In the area of early childhood music education, however, research in the fields of musical play and scaffolding learning are scarce. Within the few existing studies, there was a call for more research regarding scaffolding in early childhood music education. de Vries (2005) notes the lack of scaffolding research in early childhood music education and in my previous research on musical play (Smith, 2005) I also noted the importance of conducting more research in this area. Since play is an important aspect of early childhood education it seemed appropriate to combine the call for increased early childhood education research regarding scaffolding within the context of musical play.

Findings of the Study

This study revealed findings in two layers. Layer One indicated that during the musical play of young children, peers and adults involve themselves in a variety of activities including: questioning, modeling and demonstrating, prompting, expanding, collaborating, joint problem solving, praising, confirming, providing feedback, and using physical gestures. These findings correspond to many of the results of research in other areas of early childhood education (Jordan, 2004; MacNaughton & Williams, 1998, cited in de Vries, 2005). It is significant to note that these findings also point to the activities associated with scaffolding during incidents of musical play. The research questions that guided my study focused on the case study question related to *how* scaffolding is conducted by children, their peers, and adults within a context of musical play. The research questions were more clearly answered in the second layer of analysis.

Layer Two of the analysis indicated *how* scaffolding was accomplished during times of musical play by the children themselves (self-scaffolding) and during interactions with peers and adults. It was revealed that scaffolding was accomplished by using approaches associated with assisted performance and shared activity. These terms are related to *how* learning takes place within the zone of proximal development. Assisted performance occurs during the time that the child is moving towards his/her higher level of performance within the zone of proximal development. In this study of musical play and scaffolding, assisted performance included: questioning, modeling, demonstrating, prompting, praising, confirming, providing feedback, and gesturing. Shared activity, on

the other hand, occurred when the child had reached the higher level of the zone of proximal development and through shared activity was able to sustain this level of performance. Examples of shared activity revealed in this study included all of the techniques included in assisted performance with the addition of collaborating and joint problem solving.

This study confirmed the findings of my earlier research (Smith, 2005) indicating that during musical play, children participate in the all of the activities associated with elementary music education curriculum topics such as: singing, playing instruments, writing music, creating music, moving to music, and reading music. The children in the current study were observed often using pretend play to facilitate their involvement in music. This study also revealed that the children and adults who interacted in the musical play environment demonstrated techniques associated with scaffolding strategies as they have been noted in early childhood education research. It is significant to note that as the children participated in musical play they also engaged in many activities that are often considered to be well beyond the curricular expectations of 4-year-old children as they are indicated in early childhood music education curriculum documents. For example, with the assistance of the teacher, Hannah demonstrated her ability to construct melodic phrases both on instruments and then with notation on the staff. It is significant to note that Hannah initiated this activity and that her intentions were honoured by the teachers with whom she was interacting.

Within the context of musical play, the children provided themselves and each other with specific assistance in order that they were able to move to higher levels within

their zones of proximal development for musical growth. They did this through the use of scaffolding approaches such as: questioning, modeling, demonstrating, and physical gestures. It became obvious that musical play provided a context in which the zone of proximal development could be recognized. Through observations and interactions that occurred during musical play, teachers and other early childhood professionals could see that which Vygotsky (1998) described as "tomorrow's development" (p. 202). Assistance in the form of scaffolding could then be provided in order that the children could reach their higher levels of the zone of proximal development. As Vygotsky (1978) indicated in his well-documented statement regarding play and the zone of proximal development, "play creates a zone of proximal development of the child. In play a child always behaves beyond his average age, above his daily behavior; in play it is as if he were a head taller than himself" (p. 102). We are also informed by Wood, Bruner, and Ross (1976) that scaffolding choices can be made specific to the learner with the assistance of information regarding the child's zone of proximal development. They indicated that scaffolding occurred with the more capable peer providing assistance for learning and Vygotsky (1978) emphasized the value of recognizing the zone of proximal development during play to making choices for assisting learners. It appears that if the zone of proximal development is recognized then scaffolding approaches can be tailored to support individual growth within the zone of proximal development. It is also interesting to note that during musical play the child can often recognize and respond to the zone of proximal development in him/herself as well as in other children by using techniques which facilitate both assisted performance and shared activity.

It was evident in this study that children are at many different levels of growth in musical understanding. For example, Hannah, could sing well in tune whereas, at the beginning of the study, Ronnie could not. One might ask if a child like Hannah should be required to spend a great amount of time participating in large group instruction based solely upon the curricular expectation that in-tune singing needs to be developed with all children. If early childhood teachers included musical play within the classroom choices and interacted with the children during musical play-time, then it is conceivable that individual children's zones of proximal development for a variety of music skills could be recognized. This recognition would then allow the teacher to use scaffolding strategies that would be helpful in aiding the movement of children to their higher levels within the zones of proximal development. Children like Hannah would be encouraged then to be involved in activities which may be more suited to their individual needs. This study confirmed the value of recognizing the zone of proximal development in choosing scaffolding techniques that are tailored to assisting and supporting children as they approach their next levels of growth in musical understanding.

Play is often included in the early childhood curriculum as a time for children to participate in an unstructured environment which supports the Piagetian-related notion of constructivist-based learning as children interact with their environment. Teachers may choose to provide children access to unstructured playtime but as Harley (1999) points out "access alone is not enough. . . . . early childhood educators . . . need the patience and vision to look *into* [emphasis in original] children's play, not just *at* [emphasis in original] it" (p. 26). It is also well documented in the music education research literature

that music in early childhood occurs most often in large group settings which are limited in opportunities for teachers to observe for the zone of proximal development.

A distinctive aspect of musical play and the interactions that can occur during musical play is the attention that can be paid to individuals, their social interactions, and their active involvement in learning. Clearly, within a musical play environment, teachers can observe for the zone of proximal development for growth in musical understanding and from these observations learn where children are in their individual progression towards musical understanding. Group instruction can also benefit from the knowledge that teachers can acquire through observations of children during musical play. More specifically, tailored use of curriculum documents could assist teachers in customizing group lessons which may more specifically meet the needs of children.

Another very important finding of my research was the confirmation of the significance of the social aspect of learning during musical play. Assisted performance and shared activity both highlighted the impact of the social nature of scaffolding. Hannah and Chelsea played together and through their social engagement Hannah assisted Chelsea in both reaching and sustaining the higher level of the zone of proximal development for instrumental performance. The social aspect of the dinosaur production specifically demonstrated the ways in which children interact with each other during musical play and indicated the back-and-forth and to-and-fro movement that occurred within this context. The conversations and discussions in which Mrs. Pauls and the children participated were also significant examples of social interactions which contributed to the growth of musical skills and understanding.

In looking at the findings of this research it is also vital to note the prominent place of pretend play in learning. The day that Ronnie found his singing voice as he pretended to be the chickadees provides a significant example of pretend musical play that specifically contributed to his success in finding and using a singing voice and his progression to the higher level of the zone of proximal development for singing. One might ask if this would have occurred as quickly and as positively if singing had only been approached using traditional large group instruction strategies in which the intentions of the teacher rather than the child were paramount.

This research offers a significant contribution to the early childhood music education literature in that it provides one of the first studies that investigates scaffolding and its application to the musical play context in early childhood education. The observation and ethnographic documentation of scaffolding interactions while children participated in the naturalistic environment during musical play affords teachers and researchers the opportunity to consider musical play as a significant strategy in the music education of young children. At the same time this research informs the early childhood education community that, if viewed within a Vygotskian framework, scaffolding can be approached using a context of assisted performance and shared activity. The recognition of these findings add to both the early childhood education literature and to the music education literature and encourages early childhood educators and professionals to consider the possibilities available when musical play is paired with broad approaches to scaffolding: assisted learning and shared activity.

It is my belief that the context of musical play can be acknowledged as an opportunity to observe and participate with children as they engage in playful interactions and pretend play. Experiences such as these provide times in which educators can see the child's zone of proximal development and then make scaffolding choices and decisions based upon informed observations. Musical play then, presents opportunities for children to engage in play within a musical context where they are afforded the chance to explore and participate in meaningful, musical ways which encourage engagement in self-scaffolding through approaches such as private speech as well as peer and teacher scaffolding within assisted performance and shared activity. Vygotsky's notion of the zone of proximal development coupled with Wood, Bruner, and Ross' (1976) concept of scaffolding are key to understanding the significance of assisted performance and shared activity within the context of musical play.

Looking Forward in Early Childhood Music Education Practices

As I reflect upon this research and the findings that emerged, I have been able to reconsider traditional teaching methods associated with early childhood music education and recommend that scaffolding approaches within a musical play context be considered as important additions to the ways in which young children engage in music experiences. When I contemplate traditional early childhood teaching practices I now understand why many of the teaching strategies along with the performance expectations were a concern for me. Both contribute to the implementation of early childhood music programs that only partially meet the musical needs of young children. Early childhood music programs

which include musical play, observation and recognition of the zone of proximal development, and scaffolding approaches associated with assisted performance and shared activity have the potential to assist teachers in tailoring instruction to better meet the needs of children within their zones of proximal development for growth in musical understanding. Programs which include musical play and scaffolding approaches of assisted performance and shared activity also have the potential to acknowledge the child as being "rich in potential, powerful, competent, and . . . connected to adults and to other children" (Malaguzzi, 1993, p. 10).

Early childhood music educators would be well advised to consider offering young children frequent opportunities to participate in musical play. These opportunities would have significant benefits if children were provided extended periods of musical playtime time in order that the zone of proximal development be effectively appraised and scaffolding approaches be put into practice. Previous research on the topic of musical play (Smith, 2005; Smithrim, 1997) also recommended that children be provided with extended periods of time for musical play in light of observations of children's enthusiastic participation with musical play but not for reasons related to acknowledging the zone of proximal development and/or scaffolding. This study demonstrates the importance of adequate amounts of time based upon the significance of the zone of proximal development in informing and influencing teaching practices and scaffolding processes.

Noise has been cited as a deterrent to the inclusion of musical play in early childhood classrooms (Smithrim, 1997) and therefore educators and other early

childhood professionals may have to develop patience and understanding of the context in which musical play occurs. The seemingly chaotic environment may discourage some from including musical play on a regular basis.

The identification of the zone of proximal development for growth in musical understanding will allow teachers of young children to make suitable scaffolding choices. Teachers may require practice in the skills associated with the recognition of the zones of proximal development for growth in musical understanding. Basic musical understanding would enable early childhood teachers to observe for the zone of proximal development for musical growth. However, many early childhood educators have a sense of musical inadequacy and therefore in order to be able to scaffold musical understanding in children they may need time to develop their own music skills. Teacher in-service programs and university-based early childhood music courses would benefit teachers who want to enhance their personal musical skills. Early childhood courses that address the skills of music along with the skills associated with the identification of the zone of proximal development would benefit the teachers and their future students. Music educators who may be unfamiliar with the work of Vygotsky may profit from in-service education experiences associated with early childhood theories of learning. Early childhood educators may also benefit from assistance with the development of an understanding of scaffolding within a musical play context.

In conclusion, this research has confirmed many of the findings of my previous research (Smith, 2005) which revealed that during musical play, children participate in all of the activities associated with music curriculum which point to children's involvement

in the skills associated with music literacy, cognition, creativity, and social and emotional development. The extension of this initial study to a research inquiry that addresses the interactions of children, their peers, and adults in the context of musical play reveals that when children and adults participate together in musical play scaffolding takes place within varying zones of proximal development through the use of a variety of approaches associated with assisted performance and shared activity. It is also significant to note that within a musical play context scaffolding is accomplished by using approaches rather than strategies. Strategy as defined by the *Oxford Dictionary* is "a plan designed to achieve a particular long term aim" (p. 1418) whereas approach is defined as, "an initial proposal" (p. 64). Approaches to scaffolding seem more suited to the nature of the play environment in which there is no known goal.

Recommendations for Further Research

Further research in the area of scaffolding during musical play would continue to inform the early childhood music teaching profession about the rich potential for teaching and learning that is available when scaffolding learning within a musical play context is included in early childhood music programs. This study paves the way for taking another look at the place of musical play and the role of the teacher within this context in early childhood. Further research that addresses a variety of topics concerning scaffolding and musical play would provide the profession with continued growth in the understanding of potential possibilities that are available for the music education of young children. The

following recommendations may stimulate others to research further in this area of early childhood education:

1. A study that looks closely at how musical play can be combined with traditional large group teaching would assist the profession in considering an expanded view of possibilities for early childhood music instruction. Teachers who are considering the inclusion of musical play as a teaching strategy would benefit from the potential teaching and organization suggestions which could possibly emerge. Teachers may be stimulated and challenged to consider early childhood music curriculum and practices in a different way.

2. Research that includes children from varying and diverse cultural contexts would provide another layer of understanding regarding the place of musical play in the educational experiences of young children. Within the Canadian cultural mosaic there are a variety of differing communities and a study that explores the musical play of children within cultures different from this study's context would provide another layer of understanding to the place and potential of scaffolding during musical play. As well, educators could become aware of implications for classroom practices within varying cultural contexts. A study which also addresses scaffolding and musical play at the Kindergarten level could inform the education profession about the possibilities that are available within a school context in addition to a private nursery school setting.

3. Another study that looks at the effects of scaffolding during musical play over an extended period of time would be helpful in informing educators of the application of Vygotsky's thoughts regarding assisted performance and shared activity within the zone

of proximal development as children grow in their understanding of music skills and concepts over time. An extended time period could provide additional implications for classroom practice and further inform the profession regarding the ways in which scaffolding during musical play could potentially influence curricular decisions and teaching practices including: the design of music curriculum for young children, the role of the teacher within the musical play context, the role and influence of peers on musical growth during musical play, and increased understanding regarding how scaffolding is realized within a musical play environment.

Concluding Remarks

It is important to keep in mind that the context of this study is bound in time and place with a specific group of children. In my role as the researcher, I have documented, reported, analyzed, and interpreted the research findings based upon my background as an early childhood music educator and conceptual understandings influenced by my beliefs about children and learning. The children in the study were from one nursery school in one particular culture and context. Generalizations to other contexts therefore can not be made. However, educators and other early childhood professionals may find that the vignettes included in this research provide information which may inform their teaching practices.

Through this, my second study related to early childhood learning within a context of musical play, I have been convinced of the significance of including play as a vital part of the early childhood music curriculum. It is through play that young children

tell us where they are in their learning and where it is that they will be in the near future. Music educators are well advised to consider musical play as a way in which they can identify the zone of proximal development and then plan and provide experiences for children that will assist them in moving to the next levels within their individual zones. Musical play offers opportunities for the fostering and enriching of musical interactions in which relationships are developed and children are regarded as the "rich" children of which Malaguzzi (1993, p. 10) spoke. Scaffolding approaches that are part of assisted performance and shared activity within the context of musical play provide children with opportunities to grow in their individual development of musical understanding.

Play provides the context in which the young child can inform teachers and other early childhood professionals about their place in the zone of proximal development. The teaching profession regards it as important to learning in early childhood settings but the music teaching community continues to implement structured, whole group approaches to early childhood music settings. Studies and scholarly writing have emphasized the need for changed practice and it is important that children receive the best teaching that can be offered in all areas, including music. It is time that the music teaching community acknowledges that which early childhood educators have learned about the place of play, Vygotsky's (1978) contribution of the zone of proximal development, and Wood, Bruner, and Ross' (1976) notion of scaffolding. The music education community would be well advised to reconsider traditional music teaching practices and begin to apply many of the teaching strategies associated with the theories of Vygotsky and the contributions of Wood, Bruner, and Ross to the development of musical understanding in early childhood.

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APPENDIX A

Sample Letter for Parents/Guardians
Invitation to Participate in Research
Information Letter to Parents/Guardians of Child Participants

January 10, 2007

Dear Parents/Guardians of _____ Nursery School Children:

My name is Kathryn Smith and I am a PhD student in the Department of Elementary Education, Faculty of Education at the University of Alberta. I am writing to ask your permission for your child to participate in my research project on children and musical play. This research will complete the requirements for my PhD degree in Elementary Education.

The purpose of this study is to observe and document the activities that children are involved in when they have the opportunity for musical play and also how children and teachers support each other's learning and growth in musical understanding during times of musical play. The importance of play in the lives of children and in educational environments has been clearly documented, however there has been very little research on the impact of play in the early childhood music teaching environment.

In my research I will be involved in music experiences at Lansdowne Nursery School for approximately three months starting on February 5, 2007. I will spend the first week getting to know the children and giving them an opportunity to ask me questions and learn about what my job as a researcher is. The following 3 month period will involve documentation of the activities of the children and their teachers through video tape, still digital photographs, artifact collections (e. g. drawings), and written transcriptions. The documentation will be carried out by research assistants who I will direct and supervise. The research assistants will comply with the University of Alberta Standards for the Protection of Human Research Participants. All research personnel will have signed confidentiality agreements.

Participation in the study is voluntary, and you may choose for your child to not be part of the research and you may also withdraw your child from the study at any time without prejudice or penalty and any collected data will be withdrawn from the data base and not included in the study. All data collected during the study will be secured and kept confidential and then destroyed at the end of the study. Your child's anonymity is assured and his/her name as well as the name of the school and its teachers will not be revealed. The research will be conducted as approved by the University of Alberta Research Ethics Board, and in a manner respectful to teaching and learning. All data will be stored in a locked cabinet during the research period. At the conclusion of the study the video tapes, transcriptions, photographs, and any other data will be stored in a secured, locked location for 5 years. The faces of all children and teachers will be pixilated to ensure anonymity.

As an experienced music educator, I believe that this research will lead to expanding current views and instructional practices in preschool music education. The findings of this study will be used to complete my PhD dissertation and the photographs, videotapes, and artifacts may also be shared with other educators in ensuing articles and presentations.

I am requesting the opportunity to work with your children and look forward to involving them in a wide variety of musical experiences. Please complete the following consent form to indicate your decision and return it to Mrs. Peters, the director of the school, as soon as possible. The research will begin once all of the consent forms have been received and a plan is in place for any children who are not going to be a part of the research. If you have any questions or concerns please contact me at 433-6387. You may

also contact my supervisor, Dr. Amanda Montgomery at 492-0914 or Dr. Dianne Oberg, Chair, Department of Elementary Education at 492-2267. I will look forward to meeting you at a meeting at the nursery school. Thank you for your consideration of this request.

Sincerely,

Kathryn Smith
PhD Candidate, Department of Elementary Education
Faculty of Education, University of Alberta
The plan for this study has been reviewed for its adherence to ethical guidelines and approved by the faculties of Education, Extension, and Augustana Research Ethics Board (EEA RAB) at the University of Alberta. For questions regarding participants' rights and ethical conduct of research, contact the Chair of the EEA RAB at (780) 492-3751.

APPENDIX B

Sample Letter for Teachers

Invitation to Participate in Research
Information Letter to Teachers

January 10, 2007

Dear Teachers of _____ Nursery School:

My name is Kathryn Smith and I am a PhD student in the Department of Elementary Education, Faculty of Education at the University of Alberta. I am writing to invite you to participate in my research project on children and musical play. This research will complete the requirements for my PhD degree in Elementary Education.

The purpose of this study is to observe and document the activities that children are involved in when they have the opportunity for musical play and also how children and teachers support each other's learning and growth in musical understanding during times of musical play. The importance of play in the lives of children and in educational environments has been clearly documented, however there has been very little research on the impact of play in the early childhood music teaching environment.

In my research I will be participating in music experiences at _____ Nursery School for approximately three months starting on February 5, 2007. I will spend the first week getting to know you and providing you with an opportunity to ask me questions and learn about what my job as a researcher is. The following 3 month period will involve documentation of the activities of both the children and teachers through video tape, still digital photographs, artifact collections (e. g. drawings), and written transcriptions. Teachers will be asked to participate in a 30 minute taped interview with the Researcher at the beginning and end of the study. The videotaping, photographing, and transcribing will be carried out by research assistants who I will direct and supervise. The research assistants will comply with the University of Alberta Standards for the Protection of Human Research Participants. All research personnel will have signed confidentiality agreements.

Participation in the study is voluntary, and you may choose to not be part of the research and you may also withdraw from the study at any time without prejudice or penalty and any collected data will be withdrawn from the data base and not included in the study. All data collected during the study will be secured and kept confidential and then destroyed after 5 years. Your anonymity is assured and your name, as well as the name of the school, will not be revealed. The research will be conducted as approved by the University of Alberta Research Ethics Board, and in a manner respectful to teaching and learning. All data will be stored in a locked cabinet during the research period. At the conclusion of the study the video tapes, transcriptions, photographs, and any other data will be stored in a secured, locked location for 5 years. The faces of all children and teachers will be pixilated to ensure anonymity.

As an experienced music educator, I believe that this research will lead to expanding current views and instructional practices in preschool music education. The findings of this study will be used to complete my PhD dissertation and the photographs, videotapes, and artifacts may also be shared with other educators in ensuing articles and presentations.

I appreciate the opportunity to work with you and look forward to your involvement in a wide variety of musical experiences. Please complete the following consent form and return it to me as soon as possible. If you have any questions or concerns please contact me at 433-6387. You may also contact my

supervisor, Dr. Amanda Montgomery at 492-0914 or Dr. Dianne Oberg, Chair, Department of Elementary Education at 492-2267. I will look forward to meeting you at a meeting at the nursery school. Thank you for your assistance in continuing research on teaching and learning.

Sincerely,

Kathryn Smith
PhD Candidate, Department of Elementary Education
Faculty of Education, University of Alberta
The plan for this study has been reviewed for its adherence to ethical guidelines and approved by the faculties of Education, Extension, and Augustana Research Ethics Board (EEA RAB) at the University of Alberta. For questions regarding participants' rights and ethical conduct of research, contact the Chair of the EEA RAB at (780) 492-3751.

APPENDIX C

Confidentiality Agreement for Research Assistants
Project title: Scaffolding During Musical Play: Peer and Teacher Interactions

I, _____, the research assistant, will assist in the data collection for the study, *Scaffolding during musical play: Peer and teacher interactions.*

I agree to:

1. keep all the research information shared with me confidential by not discussing or sharing the research in any form or format (e. g. disks, tapes, transcripts) with anyone other than the Researcher.
2. keep all research information in any form or format (e. g. disks, tapes, transcripts) secure while it is in my possession.
3. return all research information in any form (e. g. disks, tapes, transcripts) to the Researcher when I have completed the research task.
4. after consulting with the Researcher, erase or destroy all research information in any form or format regarding this research project that is not returnable to the Researcher (e. g. information stored on computer hard drive).

Research Assistant

_____ _____ _____

(print name) (signature) (date)

Researcher

_____ _____ _____

(print name) (signature) (date)

The personal information requested on this form is collected under the authority of Section 33(c) of the Alberta Freedom of Information and Protection of Privacy Act for administrative purposes only.

APPENDIX D

Informed Consent Form (Teacher)
(One Copy for the Researcher/ One copy to be retained by participant)

Research Project Title: Scaffolding During Musical Play: Peer and Teacher Interactions in Early Childhood

Investigator: Kathryn Smith, PhD Candidate, Department of Elementary Education,
Faculty of Education, University of Alberta.

Supervisor: Dr. Amanda Montgomery, Professor, Department of Elementary Education,
Faculty of Education, University of Alberta.

_____ Yes, I, _____ (teacher's name) consent to participate in the musical play activities and research.

_____ No, I, _____ (teacher's name) do not consent to participate in the musical play activities and research.

I give my consent to be interviewed, videotaped, photographed, and documented through written transcription during musical play teaching activities for this research. I understand that only the researcher will have access to the interview tapes, videotapes, photographs, and transcriptions. I give permission for the videotapes, photographs, and artifacts (e. g. drawings) to be used and shown in publications and presentations related to the research; faces of children and teachers will be digitally pixilated to ensure anonymity. I understand that my identity will be kept anonymous by not referring to me by name or location but by using a pseudonym. I understand that the information I provide will be used in the doctoral dissertation following this research but my name will not be used. A summary of the main findings will be shared and available to me after the data analysis is completed.

I understand that I am free to withdraw from the research at any time without penalty and that any collected data from me will be withdrawn from the data base and not included in the study. I understand that participation in any aspects of the study are voluntary and that I will be a part of musical play teaching activities during the nursery school day for a period of three months. I understand that there is no penalty for non-participation in the musical play activities.

I understand that there are no risks involved in the study. I may enjoy learning more about the learning possibilities of musical play experiences.

The plan for this study has been reviewed for its adherence to ethical guidelines and approved by the faculties of Education, Extension, and Augustana Research Ethics Board (EEA RAB) at the University of Alberta. For questions regarding participants' rights and ethical conduct of research, contact the Chair of the EEA RAB at (780) 492-3751.

Name of Teacher (Please Print)_____

Signature of Teacher _____

Date _____

APPENDIX E

Informed Consent Form (Child)
(One Copy for the Researcher/ One copy to be retained by parents/guardians)

Research Project Title: Scaffolding During Musical Play: Peer and Teacher Interactions in Early Childhood

Investigator: Kathryn Smith, PhD Candidate, Department of Elementary Education,
Faculty of Education, University of Alberta.

Supervisor: Dr. Amanda Montgomery, Professor, Department of Elementary Education,
Faculty of Education, University of Alberta.

_____ Yes, I consent to have my child, _____ (child's name)
participate in the musical play activities and research.

_____ No, I do not consent to have my child , _____ (child's name)
participate in the musical play activities and research.

I give my consent for my child to be videotaped, photographed, and documented through written transcription during musical play activities for this research. I understand that only the researcher will have access to the videotapes, photographs, and transcriptions. I give permission for the video tapes, photographs, and artifacts (e. g. children's drawings) to be used and shown in publications and presentations related to the research; faces of children will be digitally altered to ensure anonymity. Parents/guardians will be offered the opportunity to review the altered videotapes, photographs, and artifacts before they are designated to be included in public presentations or publications. I understand that my child's identity will be kept anonymous by not referring to him or her by name or location but by using a pseudonym. I understand that the information he or she provides will be used in the doctoral dissertation following this research but my child's name will not be used. A summary of the main findings will be shared and available to parents after the data analysis is completed.

I understand that I am free to withdraw my child from the research at any time without penalty and that any collected data will be withdrawn from the data base and not included in the study. I understand that participation in any aspects of the study are voluntary and that my child will participate in musical play activities during the nursery school day for a period of three months. I understand that there is no penalty for non-participation in the musical play activities and that children who do not participate will engage in other school activities under the supervision of their teacher.

I understand that there are no risks involved in the study. My child may enjoy telling about his or her musical play experiences.

The plan for this study has been reviewed for its adherence to ethical guidelines and approved by the Faculties of Education, Extension, and Augustana Research Ethics Board (EEA RAB) at the University of Alberta. For questions regarding participants' rights and ethical conduct of research, contact the Chair of the EEA RAB at (780) 492-3751.

Name of Parent/Guardian (Please
Print)_____

Name of Child (Please Print)
_____

Signature of Parent/Guardian
_____

Signature of Child _____ Date _____

APPENDIX F

Dear Parents,

As many of you know, the data collection portion of the Musical Play research project has been completed. I sincerely appreciate that you gave me the opportunity to work with your children on this project. I will be starting the analysis of the data very soon and would like the chance to share some of the findings of the research with you. My analysis will involve viewing all of the films, still photographs, and transcribers' observations to look for themes that will inform educators about the place of play in the development of children's musical understanding.

I would like to meet with any of you who would be interested in hearing more about this research sometime in June. Please return this form to Mrs. Peters with your contact information if you would like to speak to me personally about the findings or if you would like to be notified of the information session to be held at the University of Alberta. I will be presenting some of the findings at two conferences this spring and know that many educators throughout North America will be fascinated by the results.

Thank you once again for allowing me the privilege of working with your children. It was a pleasure! I look forward to seeing you and your children at the sharing day.

Sincerely,

Kathryn Smith
Ph.D. Candidate, Department of Elementary Education
Faculty of Education
University of Alberta

Please return this form to Mrs. Peters if you would like to be contacted regarding the findings of the Musical Play research project.

Name _____

Phone _____ e-mail _____